# 1996 NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK

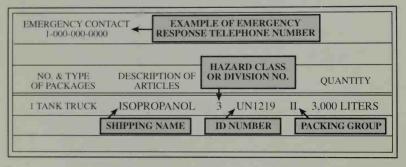


A GUIDEBOOK
FOR FIRST RESPONDERS DURING
THE INITIAL PHASE OF A
HAZARDOUS MATERIALS/DANGEROUS GOODS
INCIDENT

# SHIPPING DOCUMENTS (PAPERS)\*

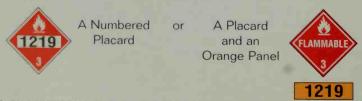
The ship 'ocument provides vital information when responding to a hazardous materials/dangerous goods\*\* incident. The shipping document contains information needed to identify the materials involved. Use this information to initiate protective actions for your own safety and the safety of the public. The shipping document contains the proper shipping name (see blue-bordered pages), the hazard class or division of the material(s), ID number (see yellow-bordered pages), and, where appropriate, the Packing Group. In addition, there must be information available that describes the hazards of the material which can be used in the mitigation of an incident. The information must be entered on or be with the shipping document. This requirement may be satisfied by attaching a guide from the NAERG96 to the shipping document, or by having the entire guidebook available for ready reference. Shipping documents are required for most dangerous goods in transportation. Shipping documents are kept in

- · the cab of the motor vehicle,
- the possession of the train crew member,
- · a holder on the bridge of a vessel, or
- an aircraft pilot's possession.



#### EXAMPLE OF PLACARD AND PANEL WITH ID NUMBER

The 4-digit ID Number may be shown on the diamond-shaped placard or on an adjacent orange panel displayed on the ends and sides of a cargo tank, vehicle or rail car.



<sup>\*</sup> For the purposes of this book, the terms shipping document/shipping paper are synonymous.
\*\* For the purposes of this book, the terms hazardous materials/dangerous goods are synonymous.

CIVIC CENTER

12/96

RESIST RUSHING IN !
APPROACH INCIDENT FROM U



STAY CLEAR OF ALL SPILLS, VAPORS, FUMES AND SMOKE

HOW TO USE THIS GUIDEBOOK DURING AN INCIDENT INVOLVING

ONE IDENTIFY THE MATERIAL BY FINDING ANY ONE OF THE FOLLOWING:

THE 4-DIGIT ID NUMBER ON A PLACARD OR ORANGE PANEL

THE 4-DIGIT ID NUMBER (after UN/NA) ON A SHIPPING DOCUMENT OR PACKAGE

THE NAME OF THE MATERIAL ON A SHIPPING DOCUMENT, PLACARD OR PACKAGE

IF AN **ID NUMBER** OR THE **NAME OF THE MATERIAL** CANNOT BE FOUND, SKIP TO THE NOTE BELOW.

TWO LOOK UP THE MATERIAL'S 3-DIGIT GUIDE NUMBER IN EITHER:

THE ID NUMBER INDEX..(the yellow-bordered pages of the guidebook)

THE NAME OF MATERIAL INDEX..(the blue-bordered pages of the guidebook)

If the guide number is supplemented with the letter "P", it indicates that the material may undergo violent polymerization if subjected to heat or contamination.

If the index entry is highlighted, LOOK FOR THE ID NUMBER AND NAME OF THE MATERIAL IN THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES (the green-bordered pages). If necessary, **BEGIN PROTECTIVE ACTIONS IMMEDIATELY** (see the section on Protective Actions).

**USE THE FOLLOWING GUIDES FOR ALL EXPLOSIVES:** 

**DIVISION 1.1 (EXPLOSIVES A) - GUIDE 112** 

DIVISION 1.2 (EXPLOSIVES A & B) - GUIDE 112

**DIVISION 1.3 (EXPLOSIVES B) - GUIDE 112** 

DIVISION 1.4 (EXPLOSIVES C) - GUIDE 114

**DIVISION 1.5 (BLASTING AGENTS) - GUIDE 112** 

**DIVISION 1.6 - GUIDE 112** 

THREE TURN TO THE NUMBERED GUIDE (the orange-bordered pages) AND READ CAREFULLY.

NOTE IF A NUMBERED GUIDE CANNOT BE OBTAINED BY FOLLOWING THE ABOVE STEPS,
AND A PLACARD CAN BE SEEN, LOCATE THE PLACARD IN THE TABLE OF PLACARDS,
THEN GO TO THE 3-DIGIT GUIDE SHOWN NEXT TO THE SAMPLE PLACARD.

IF A REFERENCE TO A GUIDE CANNOT BE FOUND AND THIS INCIDENT IS BELIEVED TO INVOLVE DANGEROUS GOODS, TURN TO GUIDE 111 NOW, AND USE IT UNTIL ADDITIONAL INFORMATION BECOMES AVAILABLE. If the shipping document lists an emergency response telephone number, call that number. If the shipping document is not available, or no emergency response telephone number is listed, IMMEDIATELY CALL the appropriate emergency response agency listed on the inside back cover of this guidebook. Provide as much information as possible, such as the name of the carrier (trucking company or railroad) and vehicle number.

# SAFETY PRECAUTIONS

APPROACH CAUTIOUSLY FROM UPWIND. Resist the urge to rush in; others cannot be helped until the situation has been fully assessed.

SECURE THE SCENE. Without entering the immediate hazard area, isolate the area and assure the safety of people and the environment, keep people away from the scene and outside the safety perimeter. Allow enough room to move and remove your own equipment.

IDENTIFY THE HAZARDS. Placards, container labels, shipping documents and/or knowledgeable persons on the scene are valuable information sources. Evaluate all available information and consult the recommended guide to reduce immediate risks. New information, provided by the shipper or obtained from another authoritative source, may change some of the emphasis or details found in the guide. Remember, the guide provides only the most important and worst case scenario information for the initial response in relation to a family or class of dangerous goods. As more material-specific information becomes available, the response should be tailored to the situation.

#### ASSESS THE SITUATION. Consider the following:

- Is there a fire, a spill or a leak?
- What are the weather conditions?
- What is the terrain like?
- Who/what is at risk: people, property or the environment?
- What actions should be taken: Is an evacuation necessary?
   Is diking necessary? What resources (human and equipment) are required and are readily available?
- What can be done immediately?

**OBTAIN HELP.** Advise your headquarters to notify responsible agencies and call for assistance from qualified personnel.

**DECIDE ON SITE ENTRY.** Any efforts made to rescue persons, protect property or the environment must be weighed against the possibility that you could become part of the problem. Enter the area only when wearing appropriate protective gear (see the section on protective clothing and equipment at the back of this guidebook).

**RESPOND.** Respond in an appropriate manner. Establish a command post and lines of communication. Rescue casualties where possible and evacuate if necessary. Maintain control of the site. Continually reassess the situation and modify the response accordingly. The first duty is to consider the safety of people in the immediate area, including your own.

**ABOVE ALL** — Do not walk into or touch spilled material. Avoid inhalation of fumes, smoke and vapors, even if no dangerous goods are known to be involved. Do not assume that gases or vapors are harmless because of lack of a smell—odorless gases or vapors may be harmful.

#### WHO TO CALL FOR ASSISTANCE

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Follow the steps outlined in your organization's standard operating procedures and/or local emergency response plan for obtaining qualified assistance. Generally, the notification sequence and requests for technical information beyond what is available in this guidebook should occur in the following order:

#### 1. ORGANIZATION/AGENCY

Notify your organization/agency. This will set in motion a series of events based upon the information provided. Actions may range from dispatching additional trained personnel to the scene to activating the local emergency response plan. Ensure that local fire and police departments have been notified.

#### 2. EMERGENCY RESPONSE TELEPHONE NUMBER

Locate and call the telephone number listed on the shipping document. The person answering the phone at the listed emergency response number must be knowledgeable of the materials and mitigation actions to be taken, or must have immediate access to a person who has the required knowledge.

#### 3. NATIONAL ASSISTANCE

Contact the appropriate emergency response agency listed on the inside back cover of this guidebook when the emergency response telephone number is not available. Upon receipt of a call describing the nature of the incident, the agency will provide immediate advice on handling the early stages of the incident. The agency will also contact the shipper or manufacturer of the material for more detailed information and request on-scene assistance when necessary.

Collect and provide as much of the following information as can safely be obtained:

Your name, call back telephone number, FAX number
Location and nature of problem
Name and identification number of material(s) involved
Shipper/consignee/point of origin
Carrier name, rail car or truck number
Container type and size
Quantity of material transported/released
Local conditions (weather, terrain, proximity to schools, hospitals, etc.)
Injuries and exposures

Local emergency services that have been notified

#### CANADA

#### 1. CANUTEC

**CANUTEC** is the **Canadian Transport Emergency Centre** operated by the Transport Dangerous Goods Directorate of Transport Canada.

CANUTEC provides a national bilingual (French and English) advisory service and is staffed by professional chemists experienced and trained in interpreting technical information and providing emergency response advice.

# In an emergency, CANUTEC may be called collect at 613-996-6666 (24 hours)

In a non-emergency situation, please call the information line at 613-992-4624 (24 hours).

#### 2. PROVINCIAL AGENCIES

Although technical information and emergency response assistance can be obtained from **CANUTEC**, there are federal and provincial regulations requiring the reporting of dangerous goods incidents to certain authorities.

The following list of provincial agencies is supplied for your convenience.

Province	Emergency Authority and/or Telephone Number
Alberta	Local Police
British Columbia	Local Police or 604-387-5956
Manitoba	Local Police or fire brigade, as appropriate, or 204-945-4888
New Brunswick	Local Police or 1-800-565-1633* or 902-426-6030
Newfoundland	Local Police or 709-772-2083
Northwest Territories	403-920-8130
Nova Scotia	Local Police or 1-800-565-1633* or 902-426-6030
Ontario	Local Police
Prince Edward Island	Local Police or 1-800-565-1633* or 902-426-6030
Quebec	Local Police
Saskatchewan	Local Police or 1-800-667-7525
Yukon Territory	403-667-7244

This number is not accessible from outside the provinces of New Brunswick, Nova Scotia or Prince Edward Island.

#### NOTE:

- The appropriate federal agency must be notified in the case of rail, air or marine incidents.
- The nearest police department must be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infectious substances.
- 3. CANUTEC must be notified in the case of:
  - a. lost, stolen or misplaced infectious substances;
  - b. an incident involving infectious substances or radioactive materials;
  - c. an incident where the shipping documents display **CANUTEC's** telephone number 613-996-6666 as the emergency telephone number; or
  - d. a dangerous goods incident in which a railway vehicle is involved.

#### **UNITED STATES**

1. CHEMTREC®, a service of the Chemical Manufacturers Association, can be reached as follows:

CALL CHEMTREC® (24 hours)
1-800-424-9300 (Toll-free in the U.S. and Canada)
703-527-3887 (For calls originating elsewhere; collect calls are accepted)

or

2. CHEM-TEL, INC., an emergency response communication service, can be reached as follows:

CALL CHEM-TEL, INC. (24 hours)
1-800-255-3924 (Toll-free in the U.S. and Canada)
813-979-0626 (For calls originating elsewhere; collect calls are accepted)

The emergency response information services shown above have requested to be listed as providers and have agreed to provide emergency response information to all callers.

CHEMTREC® and CHEM-TEL, INC. maintain a current list of state and Federal radiation authorities who provide information and technical assistance on handling incidents involving radioactive materials.

3. NATIONAL RESPONSE CENTER (NRC)

The NRC, which is operated by the U.S. Coast Guard, receives reports required when dangerous goods and hazardous substances are spilled. After receiving notification of an incident, the NRC will immediately notify the appropriate Federal On-Scene Coordinator and concerned Federal agencies. Federal law requires that anyone who releases into the environment a reportable quantity of a hazardous substance (including oil when water is, or may be affected) or a material identified as a marine pollutant, must **immediately** notify the NRC. When in doubt as to whether the amount released equals the required reporting levels for these materials, the NRC should be notified.

CALL NRC (24 hours)
1-800-424-8802 (Toll-free in the U.S. and Canada)
202-267-2675 in District of Columbia

Calling the emergency response telephone number, CHEMTREC® or CHEM-TEL, INC., does not constitute compliance with regulatory requirements to call the NRC.

#### 4. MILITARY SHIPMENTS

For assistance at incidents involving materials being shipped by, for, or to the Department of Defense (DOD), call one of the following numbers (24 hours):

703-697-0218 (call collect) (U.S. Army Operations Center) for incidents involving explosives and ammunition.

1-800-851-8061 (toll free) (Defense Logistics Agency) for incidents involving dangerous goods other than explosives and ammunition.

The above numbers are for emergencies only.

#### **MEXICO**

 SETIQ (Emergency Transportation System for the Chemical Industry), a service of the National Association of Chemical Industries (ANIQ), can be reached as follows:

Call SETIQ (24 hours)
91-800-00-214 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
575-0838, 575-0842 or 559-1588
For calls originating elsewhere, call
0-11-52-5-575-0838 or 0-11-52-5-575-0842

CECOM, the National Center for Communications of the Civil Protection Agency, can be reached as follows:

CALL **CECOM** (24 hours)

91-800-00-413 in the Mexican Republic

For calls originating in Mexico City and the Metropolitan Area

550-1496, 550-1552, 550-1485, or 550-4885

FAX 616-5560 or 616-5561

For calls originating elsewhere, call 0-11-52-5-550-1496, 0-11-52-5-550-1552, 0-11-52-5-550-1485, or 0-11-52-5-550-4885

#### **ABOUT THIS BOOK**

The 1996 North American Emergency Response Guidebook (NAERG96) was developed jointly by Transport Canada (TC), the U.S. Department of Transportation (DOT) and the Secretariat of Communications and Transportation of Mexico (SCT) for use by fire fighters, police, and other emergency services personnel who may be the first to arrive at the scene of a transportation incident involving dangerous goods. It is primarily a guide to aid first responders in quickly identifying the specific or generic hazards of the material(s) involved in the incident, and protecting themselves and the general public during the initial response phase of the incident. For the purposes of this guidebook, the "initial response phase" is that period following arrival at the scene of an incident during which the presence and/or identification of dangerous goods is confirmed, protective actions and area securement are initiated, and assistance of qualified personnel is requested. It is not intended to provide information on the physical or chemical properties of dangerous goods.

This guidebook will assist responders in making initial decisions upon arriving at the scene of a dangerous goods incident. It should not be considered as a substitute for emergency response training, knowledge or sound judgment. NAERG96 does not address all possible circumstances that may be associated with a dangerous goods incident. It is primarily designed for use at a dangerous goods incident occurring on a highway or railroad. Be mindful that there may be limited value in its application at fixed facility locations.

NAERG96 incorporates dangerous goods lists from the most recent United Nations Recommendations as well as from other international and national regulations. Explosives are not listed individually by either proper shipping name or ID Number. They do, however, appear under the general heading "Explosives" on the first page of the ID Number index (yellow-bordered pages) and alphabetically in the Name of Material index (blue-bordered pages).

All guides have been revised and are now presented in a two (2) page format and identified by three (3) digit numbers. The letter "P" following the guide number in the yellow-bordered and blue-bordered pages identifies those materials which present a polymerization hazard under certain conditions; for example, Acrolein, inhibited, Guide 131P. Each orange-bordered, numbered guide provides essential guidance in a form which is designed for first responders with limited dangerous goods training. A numbered guide is assigned to each material listed in the indexes. Neither the order in which the guides are presented nor the guide number itself is of any significance. Since many materials represent similar types of hazards that call for similar initial emergency response actions, only a limited number of guides are required. The orange-bordered guides are not applicable when materials of different classes and/or divisions are involved in an incident and are intermingled. Incidents involving more than one class of material require the incident commander to obtain

informed advice as soon as the scope of the incident can be determined. Materials involved in an incident may, by themselves, be nonhazardous; however, a combination of several materials or the involvement of a single material in a fire, may still produce serious health, fire or explosion hazards.

First responders at the scene of a dangerous goods incident, should seek additional specific information about any material in question as soon as possible. The information received by contacting the appropriate emergency response agency, the emergency response number on the shipping document, or by consulting the information on or accompanying the shipping document, may be more specific and accurate than this guidebook in providing quidance for the materials involved.

# BECOME FAMILIAR WITH THIS GUIDEBOOK BEFORE USING IT DURING AN

**EMERGENCY!** In the U.S., according to the requirements of the U.S. Occupational Safety and Health Administration (OSHA 1910.120), and regulations issued by the U.S. Environmental Protection Agency, first responders must be trained regarding the use of this guidebook.

#### HOW TO USE THE GUIDES EFFECTIVELY

The titles of the guides identify the general hazards of the dangerous goods covered; however, the titles do not necessarily reflect the hazard classification under transportation regulations.

Each guide is divided into three main sections: the first section describes potential hazards that the material may display in terms of fire/explosion and health effects upon exposure. The emergency responder should consult this section first since it indicates in very brief form the dangers the material may present. This allows the responder to make decisions regarding the protection of the emergency response team as well as the surrounding population.

The second section outlines suggested public safety measures based on the situation at hand. It provides general information regarding immediate isolation of the incident site, the recommended type of protective clothing and respiratory protection. Suggested evacuation distances are listed for small and large spills and for fire situations.

The third section covers emergency response actions and first aid. It outlines special precautions for incidents which involve fire, spill or chemical exposure. Several recommendations are listed under each part which will further assist in the decision making process.

The information on first aid is general guidance prior to seeking medical care. It is difficult to be specific about the kind of medical assistance that should be sought since factors such as the extent of the exposure, the material(s) involved, the nature and severity of the injuries, the proximity to emergency and medical services may vary. When human exposure has occurred, immediate efforts should be made to remove all contaminated clothing and shoes and to obtain medical assistance in evaluating the injuries and need for hospitalization.

#### HAZARD CLASSIFICATION SYSTEM

The hazard class of dangerous goods is indicated either by its class (or division) number or name. For a placard corresponding to the primary hazard class of a material, the hazard class or division number must be displayed in the lower corner of the placard. However, no hazard class or division number may be displayed on a placard representing the subsidiary hazard of a material. For other than Class 7 or the OXYGEN placard, text indicating a hazard (for example, "CORROSIVE") is not required. Text is shown only in the U.S. The hazard class or division number must appear on the shipping document after each shipping name.

#### Class 1 - Explosives

Division 1.1	Explosives with a mass explosion hazard
Division 1.2	Explosives with a projection hazard
Division 1.3	Explosives with predominantly a fire hazard
Division 1.4	Explosives with no significant blast hazard
Division 1.5	Very insensitive explosives; blasting agents
Division 1.6	Extremely insensitive detonating articles

#### Class 2 - Gases

Division 2.1	Flammable gases
Division 2.2	Non-flammable, non-toxic* compressed gases
Division 2.3	Gases toxic* by inhalation
Division 2.4	Corrosive gases (Canada)

### Class 3 - Flammable liquids (and Combustible liquids [U.S.])

# Class 4 - Flammable solids; Spontaneously combustible materials; and Dangerous when wet materials

DIVISION T. I	i lattitiable solius
Division 4.2	Spontaneously combustible materials
Division 4.3	Dangerous when wet materials

### Class 5 - Oxidizers and Organic peroxides

Division 5.1	Oxidizers
Division 5.2	Organic peroxides

Division 4.1 Elemmoble colide

### Class 6 - Toxic\* materials and Infectious substances

Division 6.1	Toxic* materials
Division 6.2	Infectious substances

# Class 7 - Radioactive materials

#### Class 8 - Corrosive materials

# Class 9 - Miscellaneous dangerous goods

Division 9.1	Miscellaneous dangerous goods (Canada)
Division 9.2	Environmentally hazardous substances (Canada)
D: : : 0 0	

Division 9.3 Dangerous wastes (Canada)

<sup>\*</sup> The words "poison" or "poisonous" are synonymous with the word "toxic".

# **NOTES**

The more and the same

### INTRODUCTION TO THE TABLE OF PLACARDS

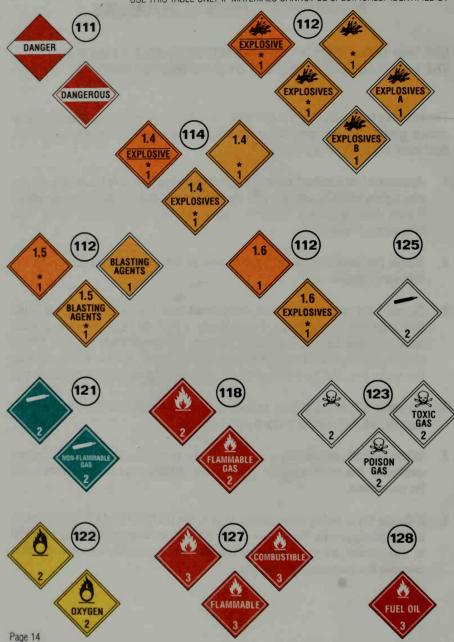
# USE THIS TABLE ONLY IF YOU HAVE NOT BEEN ABLE TO IDENTIFY THE MATERIAL(S) IN TRANSPORT BY ID NUMBER OR NAME

The next two pages display the placards used on transport vehicles carrying dangerous goods. As you approach a reported or suspected dangerous goods incident involving a placarded vehicle:

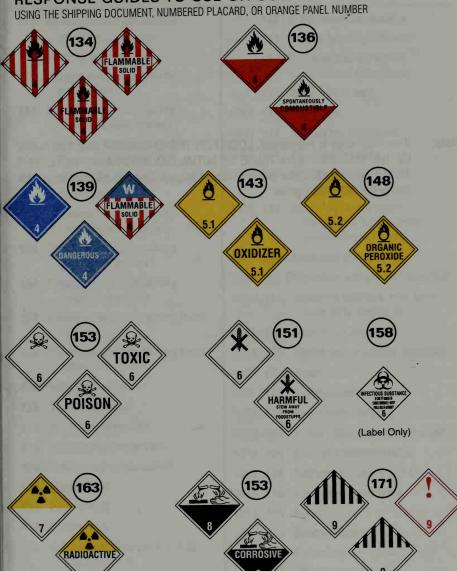
- Approach the incident cautiously from upwind to a point from which you can safely identify and/or read the placard or orange panel information.
   If wind direction allows, consider approaching the incident from uphill. Use binoculars, if available.
- 2. Match the vehicle placard(s) with one of the placards displayed on the following pages.
- 3. Consult the numbered guide associated with the sample placard. Use that information for now. For example, a FLAMMABLE (Class 3) placard leads to Guide 127. A CORROSIVE (Class 8) placard leads to Guide 153. If multiple placards point to more than one guide, initially use the most conservative guide (i.e., the guide requiring the greatest degree of protective actions).
- 4. Remember that the guides associated with the placards provide the most significant risk and/or hazard information.
- When specific information, such as ID number or shipping name, becomes available, the more specific guide recommended for that material must be consulted.
- If Guide 111 is being used because only the DANGER/DANGEROUS placard is displayed or the nature of the spilled, leaking, or burning material is not known, as soon as possible, get more specific information concerning the material(s) involved.

## TABLE OF PLACARDS AND INITIAL

USE THIS TABLE ONLY IF MATERIALS CANNOT BE SPECIFICALLY IDENTIFIED BY



# RESPONSE GUIDES TO USE ON-SCENE



Note:

If an index entry is highlighted, LOOK FOR THE ID NUMBER AND THE NAME OF THE MATERIAL in the TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES (the green-bordered pages). Use this information in addition to the referenced guide.

ID Gui No. No		ID No.	Gui Nô	
112	Ammonium nitrate-fuel oil	-	135	p-Nitrosodiethylaniline
	mixtures		171	Plastic molding material
—— 112	Blasting agent, n.o.s.		171F	Polymerizable material,
171	Cargo transport unit under fumigation		337	stabilized with dry ice
154	Chemical kits (containing		133	Wool waste, wet
134	corrosive substances)	1001		Acetylene
128	Chemical kits (containing	1001		Acetylene, dissolved
	flammable liquids)		122	
—— 133	Chemical kits (containing flammable solids)	1003	122	Air, refrigerated liquid (cryogenic liquid)
140	Chemical kits (containing oxidizing substances)	1003	122	Air, refrigerated liquid (cryogenic liquid), non-
153	Chemical kits (containing			pressurized
	poisonous liquids)	1005	125	Ammonia, anhydrous
154	Chemical kits (containing	1005	125	Ammonia, anhydrous, liquefied
	poisonous solids)	1005	125	Ammonia solution, with more
—— 153	Chemical kits (containing toxic liquids)	1005	125	than 50% Ammonia Anhydrous ammonia
154	Chemical kits (containing toxic	1005		Anhydrous ammonia, liquefied
	solids)	1005		Argon
—— 129	1-Chloroheptane	1006		Argon, compressed
—— 129	1-Chlorohexane	1008		Boron trifluoride
— 152	m-Dichlorobenzene	_		Boron trifluoride, compressed
136	p-Diethylnitrosoaniline	1009		Bromotrifluoromethane
153	2-Ethyl-3-propylacrolein	1009		Refrigerant gas R-13B1
— 112	Explosive A			Butadienes, inhibited
—— 112	Explosive B	1011	115	Butane
114	Explosive C	1011	115	Butane mixture
—— 112	Explosives, division 1.1, 1.2, 1.3, 1.5 or 1.6	1012	115	Butylene
114	Explosives, division 1.4	1013	120	Carbon dioxide
133	Fibres, animal or vegetable,	1013	120	Carbon dioxide, compressed
422	burnt, wet or damp	1014	122	Carbon dioxide and Oxygen mixture
133 159	Fibres, vegetable, dry Methylbromoacetone	1014	122	Carbon dioxide and Oxygen
				mixture, compressed

ID Guide Name of Material No. No.	No. No.
1014 122 Oxygen and Carbon dioxide	1030 115 Refrigerant gas R-152a
mixture	1032 118 Dimethylamine, anhydrous
1014 122 Oxygen and Carbon dioxide	1033 115 Dimethyl ether
mixture, compressed	1035 115 Ethane
1015 126 Carbon dioxide and Nitrous oxide mixture	1035 115 Ethane, compressed
1015 126 Nitrous oxide and Carbon	1036 118 Ethylamine
dioxide mixture	1037 115 Ethyl chloride
1016 119 Carbon monoxide	1038 115 Ethylene, refrigerated liquid (cryogenic liquid)
1016 119 Carbon monoxide, compressed	
1017 <b>124</b> Chlorine	1039 115 Ethyl methyl ether
1018 126 Chlorodifluoromethane	1039 115 Methyl ethyl ether
1018 126 Refrigerant gas R-22	1040 119 Ethylene oxide
1020 126 Chloropentafluoroethane	1040 119 Ethylene oxide with Nitrogen
1020 <b>126</b> Refrigerant gas R-115	1041 115 Carbon dioxide and Ethylene oxide mixture, with more than
1021 <b>126</b> 1-Chloro-1,2,2,2- tetrafluoroethane	9% but not more than 87% Ethylene oxide
1021 126 Chlorotetrafluoroethane	1041 115 Carbon dioxide and Ethylene
1021 <b>126</b> Refrigerant gas R-124	oxide mixtures, with more
1022 126 Chlorotrifluoromethane	than 6% Ethylene oxide
1022 126 Refrigerant gas R-13	1041 115 Ethylene oxide and Carbon dioxide mixture, with more
1023 119 Coalgas	than 9% but not more than
1023 119 Coal gas, compressed	87% Ethylene oxide
1026 119 Cyanogen	1041 115 Ethylene oxide and Carbon dioxide mixtures, with more
1026 119 Cyanogen, liquefied	than 6 % Ethylene oxide
1026 119 Cyanogen gas	1043 125 Fertilizer, ammoniating solution
1027 115 Cyclopropane	with free Ammonia
1027 115 Cyclopropane, liquefied	1044 126 Fire extinguishers with
1028 <b>126</b> Dichlorodifluoromethane	compressed gas
1028 126 Refrigerant gas R-12	1044 126 Fire extinguishers with liquefied gas
1029 126 Dichlorofluoromethane	1045 <b>124</b> Fluorine
1029 126 Refrigerant gas R-21	1045 124 Fluorine, compressed
1030 <b>115</b> 1,1-Difluoroethane	1046 <b>121</b> Helium
1030 115 Difluoroethane	1046 121 Helium, compressed
Dago 10	

ID No.	Guid No.		ID No.	Gui No	
1048	125	Hydrogen bromide, anhydrous	1061	118	Methylamine, anhydrous
1049	115	Hydrogen	1062	123	Methyl bromide
1049	115	Hydrogen, compressed	1063	115	Methyl chloride
1050	125	Hydrogen chloride, anhydrous	1063	115	Refrigerant gas R-40
1051	117	Hydrocyanic acid, aqueous	1064	117	Methyl mercaptan
		solutions, with more than 20% Hydrogen cyanide	1065	121	Neon
1051	117	Hydrocyanic acid, liquefied	1065	121	Neon, compressed
	117	Hydrogen cyanide, anhydrous,	1066	121	Nitrogen
		stabilized	1066	121	Nitrogen, compressed
1051	117	Hydrogen cyanide, stabilized	1067	124	Dinitrogen tetroxide
1052	125	Hydrogen fluoride, anhydrous	1067	124	Dinitrogen tetroxide, liquefied
1053	117	Hydrogen sulfide	1067	124	Nitrogen dioxide
1053	117	Hydrogen sulfide, liquefied	1067	124	Nitrogen dioxide, liquefied
1053	117	Hydrogen sulphide	1067	124	Nitrogen peroxide, liquid
1053	117	Hydrogen sulphide, liquefied	1067	124	Nitrogen tetroxide, liquid
1055	115	Isobutylene	1069	125	Nitrosyl chloride
1056	121	Krypton	1070	122	Nitrous oxide
1056	121	Krypton, compressed	1070	122	Nitrous oxide, compressed
1057	115	Cigarette lighter, with flammable	1071	119	Oil gas
		gas	1071	119	Oil gas, compressed
1057	115	Flammable gas in lighter for	1072	122	Oxygen
1057	115	cigars, cigarettes, etc.	1072	122	Oxygen, compressed
1057		Lighter refills (cigarettes) (flammable gas)	1073	122	Oxygen, refrigerated liquid (cryogenic liquid)
1057	115	Lighters (cigarettes) (flammable gas)	1075	115	Butane
1058	121	Liquefied gas (nonflammable)	1075	115	Butane mixture
1058		Liquefied gases, non-flammable,	1075	115	Butylene
		charged with Nitrogen,	1075	115	Isobutane
		Carbon dioxide or Air	1075	115	Isobutane mixture
1060	116P	Methylacetylene and Propadiene mixture,	1075	115	Isobutylene
01111		stabilized	1075	115	Liquefied petroleum gas
1060	116P	Propadiene and	1075	115	LPG
1111	Jan.	Methylacetylene mixture, stabilized	1075	115	Petroleum gases, liquefied

ID No.	Guide Name of Material No.	ID Gui	
1075	115 Propane	1100 131	Allyl chloride
1075	115 Propane mixture	1104 129	Amyl acetates
1075	115 Propylene	1105 129	Amyl alcohols
1076	125 Diphosgene	1106 132	Amylamines
1076	125 Phosgene	1107 129	Amyl chloride
1077	115 Propylene	1108 127	n-Amylene
1078	126 Dispersant gas, n.o.s.	1108 127	1-Pentene
1078	126 Refrigerant gas, n.o.s.	1109 129	Amyl formates
1079	125 Sulfur dioxide	1110 127	n-Amyl methyl ketone
1079	125 Sulfur dioxide, liquefied	1110 127	Amyl methyl ketone
1079	125 Sulphur dioxide	1110 127	Methyl amyl ketone
1079	125 Sulphur dioxide, liquefied	1111 130	Amyl mercaptan
1080	126 Sulfur hexafluoride	1112 140	Amyl nitrate
1080	126 Sulphur hexafluoride	1113 129	Amyl nitrite
1081	116P Tetrafluoroethylene, inhibited	1114 130	Benzene
1082	119P Trifluorochloroethylene	1118 <b>130</b>	Brake fluid, hydraulic
1082	119P Trifluorochloroethylene,	1120 <b>129</b>	Butanols
l	inhibited	1120 129	Butyl alcohol
	118 Trimethylamine, anhydrous	1123 <b>129</b>	Butyl acetates
	116P Vinyl bromide, inhibited	1125 <b>132</b>	n-Butylamine
	116P Vinyl chloride	1126 <b>129</b>	1-Bromobutane
	116P Vinyl chloride, inhibited	1126 <b>129</b>	n-Butyl bromide
	116P Vinyl chloride, stabilized	1127 130	Butyl chloride
	116P Vinyl methyl ether	1127 130	Chlorobutanes
	116P Vinyl methyl ether, inhibited	1128 <b>129</b>	n-Butyl formate
1088	127 Acetal	1129 <b>129</b>	Butyraldehyde
	129 Acetaldehyde	1130 <b>128</b>	Camphor oil
	127 Acetone	1131 <b>131</b>	Carbon bisulfide
	127 Acetone oils	1131 <b>131</b>	Carbon bisulphide
	131P Acrolein, inhibited	1131 <b>131</b>	Carbon disulfide
1093	131P Acrylonitrile, inhibited	1131 <b>131</b>	Carbon disulphide
	131 Allyl alcohol	1133 <b>127</b>	Adhesives (flammable)
1099	131 Allyl bromide	1133 127	Cement (flammable)
Page 20			

ID No.	Guic No.	le Name of Material	ID No.	Gui No.	
1133	127	Cement, container, linoleum, tile	1156	127	Diethyl ketone
		or wallboard, liquid	1157	127	Diisobutyl ketone
1133		Cement, leather	1158	132	Diisopropylamine
1133	127	Cement, liquid, n.o.s.	1159	127	Diisopropyl ether
1133	127	Cement, pyroxylin	1160	129	Dimethylamine, aqueous
1133	127	Cement, roofing, liquid			solution
1133	127	Cement, rubber	1160		Dimethylamine, solution
1134	130	Chlorobenzene	1161	129	Dimethyl carbonate
1135	131	Ethylene chlorohydrin	1162	155	Dimethyldichlorosilane
1136	128	Coal tar distillates, flammable	1163	131	1,1-Dimethylhydrazine
1137 1139	128 127	Coal tar distillate Coating solution	1163	131	Dimethylhydrazine, unsymmetrical
1142		Compound, vulcanizing, liquid	1164	130	Dimethyl sulfide
		(flammable)	1164	130	Dimethyl sulphide
1142	127	Compounds, polishing, liquid,	1165	127	Dioxane
		etc. (flammable)	1166	127	Dioxolane
1142	127	Flammable liquid preparations, n.o.s.	1167	131F	P Divinyl ether, inhibited
1143	121D	Crotonaldehyde, inhibited	1168	127	Driers, paint or varnish, liquid,
The same					n.o.s.
1143		Crotonaldehyde, stabilized	1169	127	Extracts, aromatic, liquid
1144		Crotonylene	1170	127	Ethanol
1145	128	Cyclohexane	1170	127	Ethanol, solution
1146		Cyclopentane	1170	127	Ethyl alcohol
1147		Decahydronaphthalene	1170	127	Ethyl alcohol, solution
1148		Diacetone alcohol	1171	127	Ethylene glycol monoethyl ether
1149	127	Butyl ethers	1172	129	Ethylene glycol monoethyl ether
	127	Dibutyl ethers			acetate
1150		1,2-Dichloroethylene	1173		Ethyl acetate
		Dichloroethylene	1175		
1152		Dichloropentanes	1176		Ethyl borate
1153		Ethylene glycol diethyl ether	1177		2-Ethylbutyl acetate
1154		Diethylamine	1177		Ethylbutyl acetate
1155		Diethyl ether	1178	129	2-Ethylbutyraldehyde
1155	127	Ethyl ether	1179	127	Ethyl butyl ether
					Page 21

ID Gui No. No		ID No.	Gui No	
1180 129	Ethyl butyrate	1203	128	Gasoline
1181 155	Ethyl chloroacetate	1203	128	Motor spirit
1182 155	Ethyl chloroformate	1203	128	Petrol
1183 139	Ethyldichlorosilane	1204	127	Nitroglycerin, solution in
1184 129	Ethylene dichloride			alcohol, with not more than 1% Nitroglycerin
1185 <b>131</b>	P Ethyleneimine, inhibited	1204	127	Spirits of Nitroglycerin, not
1188 <b>127</b>	Ethylene glycol monomethyl ether			exceeding 1 % Nitroglycerin
1189 <b>129</b>	Ethylene glycol monomethyl	1206		Heptanes
	ether acetate	1207		Hexaldehyde
1190 129	Ethyl formate	1208		Hexanes
1191 <b>129</b>	Ethylhexaldehydes	1208		Neohexane
1191 129	Octyl aldehydes	1210		Ink, printer's, flammable
1192 <b>129</b>	Ethyl lactate	1210		Printing ink, flammable
1193 <b>127</b>	Ethyl methyl ketone	1212		Isobutanol
1193 <b>127</b>	Methyl ethyl ketone	1212		Isobutyl alcohol
1194 <b>131</b>	Ethyl nitrite, solution	1213		Isobutyl acetate
1195 <b>129</b>	Ethyl propionate	1214		Isobutylamine
1196 <b>155</b>	Ethyltrichlorosilane	1216		Isooctene
1197 <b>127</b>	Extracts, flavoring, liquid			Isoprene, inhibited
1197 <b>127</b>	Extracts, flavouring, liquid	1219		Isopropanol
1198 132	Formaldehyde, solution,	1219		Isopropyl alcohol
	flammable		129	Isopropyl acetate
1198 <b>132</b>	Formaldehyde, solutions	1221		Isopropylamine
1199 <b>132</b> F	(Formalin)	1222		Isopropyl nitrate
	P Furfuraldehydes	1223		Kerosene
1201 127	Fusel oil	1224		Ketones, liquid, n.o.s.
1201 127	Diesel fuel	1226	127	Cigarette lighter, with flammable liquid
	Fuel oil	1226	127	
1202 <b>128</b> 1202 <b>128</b>	Fuel oil, no. 1,2,4,5,6	1220	127	Lighters for cigars, cigarettes etc. with lighter fluid
1202 128	Gas oil	1226	127	Lighters for cigars, cigarettes
1202 128	Heating oil, light			(flammable liquid)
1203 128	Gasohol	1228	131	Mercaptan mixture, aliphatic
Page 22				

ID No.	Gui No.		ID No.	Gui No	
1228	131	Mercaptan mixture, liquid,	1251	1311	P Methyl vinyl ketone, stabilized
	I a fi	flammable, poisonous, n.o.s.	1255	128	Naphtha, petroleum
1228	131	Mercaptan mixture, liquid, flammable, toxic, n.o.s.	1255	128	Petroleum naphtha
1228	131	Mercaptan mixtures, liquid,	1256	128	Naphtha, solvent
3	101	n.o.s.	1257	128	Natural gasoline
1228	131	Mercaptans, liquid, flammable,	1259	131	Nickel carbonyl
	No.	poisonous, n.o.s.	1261	129	Nitromethane
1228	131	Mercaptans, liquid, flammable, toxic, n.o.s.	1262	128	Isooctane
1229	129	Mesityl oxide	1262	128	Octanes
1230		Methanol	1263		Paint (flammable)
	131	Methyl alcohol	1263	127	Paint related material (flammable)
1231	129	Methyl acetate	1264	129	Paraldehyde
1232	127	Methyl acetone	1265		Isopentane
1233	129	Methylamyl acetate	1265	128	n-Pentane
1234	127	Methylal	1265	128	Pentanes
1235	132	Methylamine, aqueous solution	1266	127	Perfumery products, with
1237	129	Methyl butyrate			flammable solvents
1238	155	Methyl chloroformate	1267	128	Petroleum crude oil
1239	131	Methyl chloromethyl ether	1268	128	Petroleum distillates, n.o.s.
1242	139	Methyldichlorosilane			Petroleum products, n.o.s.
1243	129	Methyl formate	1270	128	Oil, petroleum, n.o.s.
1244	131	Methylhydrazine	1270	128	Petroleum oil
1245	127	Methyl isobutyl ketone	1271	128	Petroleum ether
1246	127P	Methyl isopropenyl ketone,	1271	128	Petroleum spirit
4047	100	inhibited	1272		Pine oil
1247	129P	Methyl methacrylate monomer, inhibited	1274		n-Propanol
1247	129P	Methyl methacrylate monomer,	1274		normal Propyl alcohol
		uninhibited	1274		Propyl alcohol, normal
1248	129	Methyl propionate	1275		Propionaldehyde
1249	127	Methyl propyl ketone	1276		n-Propyl acetate
1250	155	Methyltrichlorosilane	1277		Monopropylamine
1251	131P	Methyl vinyl ketone	1277	132	Propylamine

	No.	Gui No.		No.	Guid No.	
	1278	129	1-Chloropropane	1305	155	Vinyltrichlorosilane, inhibited
	1278	129	Propyl chloride	1306	129	Wood preservatives, liquid
	1279	130	1,2-Dichloropropane	1307	130	Xylenes
	1279 1279	130	Dichloropropane Propylene dichloride	1308	170	Zirconium metal, liquid, suspension
			Propylene oxide	1308	170	Zirconium suspended in a
	1281	129	Propyl formates			flammable liquid
	1282		Pyridine	1308	170	Zirconium suspended in a liquid (flammable)
	1286	127	Rosin oil	1309	170	Aluminum powder, coated
	1287	127	Rubber solution	1310	113	
	1288	128	Shale oil			not less than 10% water
	1289	132	Sodium methylate, alcohol	1312	133	Borneol
			mixture	1313	133	Calcium resinate
	1289	132	Sodium methylate, solution in alcohol	1314	133	Calcium resinate, fused
	1292	132	Ethyl silicate	1318	133	Cobalt resinate, precipitated
	1292		Tetraethyl silicate	1320	113	Dinitrophenol, wetted with not less than 15% water
	1293	127	Tinctures, medicinal	1321	113	Dinitrophenolates, wetted with
	1294	130	Toluene			not less than 15% water
	1295	139	Trichlorosilane	1322	113	Dinitroresorcinol, wetted with not less than 15% water
	1296	132	Triethylamine	1323	170	Ferrocerium
	1297	132	Trimethylamine, aqueous	1323		Film
	4000	455	solution	1324	EF.	Films, nitrocellulose base
	1298		Trimethylchlorosilane	1325		Air bag inflators
	1299 1300	128	Turpentine Turpentine substitute	1325		Air bag modules
	1300		Vinyl acetate	1325		Antimony sulfide, solid
	1301		Vinyl acetate, inhibited	1325		Antimony sulphide, solid
			Vinyl ethyl ether	1325		Burnt cotton, not picked
			Vinyl ethyl ether, inhibited	1325		Cosmetics, n.o.s.
			Vinylidene chloride, inhibited	1325		Drugs, n.o.s.
			Vinyl isobutyl ether	1325		Flammable solid, n.o.s.
			Vinyl isobutyl ether, inhibited			Flammable solid, organic, n.o.s.
			Vinyltrichlorosilane			
	Page 2		Vinganomorositane			
-	age 2.	•				

ID No.	Guid No.		ID No.	Guid No.	
1325	133	Fusee (rail or highway)	1338	133	Phosphorus, amorphous
1325	133	Medicines, flammable, solid,	1338	133	Phosphorus, amorphous, red
100		n.o.s.	1338	133	Red phosphorus
1325	133	N-Methyl-N'-Nitro-N- Nitrosoguanidine	1338	133	Red phosphorus, amorphous
1325	133	Pyroxylin plastic, rod, sheet, roll, tube or scrap	1339	139	Phosphorus heptasulfide, free from yellow and white Phosphorus
	133	Smokeless powder for small arms	1339	139	Phosphorus heptasulphide, free from yellow and white
1326	170	Hafnium powder, wetted with not less than 25% water	16.5		Phosphorus
1327	133	Bhusa, wet, damp or contaminated with oil	1340	139	Phosphorus pentasulfide, free from yellow and white Phosphorus
1327	133	Hay, wet, damp or contaminated with oil	1340	139	Phosphorus pentasulphide, free from yellow and white
1327	133	Straw, wet, damp or	4044	420	Phosphorus  Dhasabassa assassissifida fasa
1328	133	contaminated with oil Hexamethylenetetramine	1341	139	Phosphorus sesquisulfide, free from yellow and white Phosphorus
1328		Hexamine	1341	139	Phosphorus sesquisulphide,
1330	133	Manganese resinate			free from yellow and white
1331	133	Matches, "strike anywhere"		1000	Phosphorus
1332	133	Metaldehyde	1343	139	Phosphorus trisulfide, free from yellow and white Phosphorus
1333		Cerium, slabs, ingots or rods	1343	139	Phosphorus trisulphide, free
1334		Naphthalene, crude	1040		from yellow and white
1334		Naphthalene, refined			Phosphorus
1336	113	Nitroguanidine (Picrite), wetted with not less than 20% water	1344	113	Picric acid, wet, with not less than 10% water
1336	113	Nitroguanidine, wetted with not less than 20% water	1344	113	Trinitrophenol, wetted with not less than 30% water
1336	113	Picrite, wetted	1345	133	Rubber scrap, powdered or
1337	113	Nitrostarch, wet, with not less		13	granulated
4007		than 30% alcohol or solvent	1345	133	Rubber shoddy, powdered or granulated
1337	113	Nitrostarch, wetted with not less than 20% water	1346	170	Silicon powder, amorphous
1337	113	Nitrostarch, wetted with not less than 30% solvent	1347	113	Silver picrate, wetted with not less than 30% water
					TANKS OF THE REAL PROPERTY AND THE PERSON NAMED IN COLUMN 1997

ID Guid No. No.		ID No.	Guid No.	
1348 <b>113</b>	Sodium dinitro-o-cresolate, wetted with not less than 15% water	1361	133	Charcoal, wood, ground, crushed, granulated or pulverized
1348 <b>113</b>	Sodium đinitro-ortho-cresolate, wetted	1361	133	Charcoal screenings, made from "Pinon" wood
1349 <b>113</b>	Sodium picramate, wetted with not less than 20% water	1361	133	Charcoal screenings, other than "Pinon" wood screenings
1350 <b>133</b>	Sulfur	1362	133	Carbon, activated
1350 <b>133</b>	Sulphur	1363	135	Copra
1352 <b>170</b>	Titanium powder, wetted with	1364	133	Cotton waste, oily
	not less than 25% water	1365	133	Cotton
1353 <b>133</b>	Fabrics impregnated with weakly	1365	133	Cotton, wet
1050 100	nitrated Nitrocellulose, n.o.s.  Fibers impregnated with weakly	1366	135	Diethylzinc
1353 <b>133</b>	nitrated Nitrocellulose, n.o.s.	1369	135	p-Nitrosodimethylaniline
1353 <b>133</b>	Fibres impregnated with weakly	1370	135	Dimethylzinc
	nitrated Nitrocellulose, n.o.s.	1372	133	Fiber, animal or vegetable,
1353 <b>133</b>	Toe puffs, nitrocellulose base			n.o.s., burnt, wet or damp
1354 <b>113</b>	Trinitrobenzene, wetted with not			Fibers
1055 110	less than 30% water	1373	133	Fabrics, animal, synthetic or vegetable, n.o.s., with oil
1355 <b>113</b>	Trinitrobenzoic acid, wetted with not less than 30% water	1373	133	Fiber, animal, synthetic or
1356 113	TNT, wetted with not less than	1010		vegetable, n.o.s., with oil
1000	30% water	1373	133	Fibres, animal, synthetic or
1356 <b>113</b>	Trinitrotoluene, wetted with not	100		vegetable, n.o.s., with oil
	less than 30% water			Fish meal, unstabilized
1357 <b>113</b>	Urea nitrate, wetted with not less than 20% water	1374	133	Fish meal containing less than 6% or more than 12% water
1358 170	Zirconium metal, powder, wet	1374	133	Fish scrap, unstabilized
1358 <b>170</b>	Zirconium powder, wetted with not less than 25% water	1374	133	Fish scrap containing less than 6% or more than 12% water
1360 <b>139</b>	Calcium phosphide	1376	135	Iron oxide, spent
1361 <b>133</b>		1376	135	Iron sponge, spent
	origin	1378	170	Metal catalyst, wetted
	Charcoal	1379	133	Paper, unsaturated oil treated
1361 <b>133</b>		1380	135	Pentaborane
1361 <b>133</b>	Charcoal, shell			

ID No.	Guid No.		ID No.	Gui No.	
1381	136	Phosphorus, white, dry or under	1389	138	Alkali metal amalgam
		water or in solution	1390	139	Alkali metal amides
1381	136	Phosphorus, yellow, dry or under water or in solution	1391	138	Alkali metal dispersion
1381	136	White phosphorus, dry	1391	138	Alkaline earth metal dispersion
1381	136	White phosphorus, in solution	1392	138	Alkaline earth metal amalgam
1381	136	White phosphorus, under water	1393	138	Alkaline earth metal alloy, n.o.s.
1381	136	Yellow phosphorus, dry	1394	138	Aluminum carbide
1381	136	Yellow phosphorus, in solution	1395	139	Aluminum ferrosilicon powder
1381	136	Yellow phosphorus, under water	1396	138	Aluminum powder, uncoated
1382		Potassium sulfide, anhydrous	1397	139	Aluminum phosphide
1382	135	Potassium sulfide, with less than 30% water of crystallization	1398	138	Aluminum silicon powder, uncoated
1382	135	Potassium sulfide, with less than	1400	138	Barium
1002	100	30% water of hydration	1401	138	Calcium
1382	135	Potassium sulphide, anhydrous	1401	138	Calcium metal, crystalline
1382	135	Potassium sulphide, with less	1402	138	Calcium carbide
		than 30% water of crystallization	1403	138	Calcium cyanamide, with more than 0.1% Calcium carbide
1382	135	Potassium sulphide, with less	1404	138	Calcium hydride
4000	105	than 30% water of hydration	1405	138	Calcium silicide
1383		Aluminum powder, pyrophoric	1406	138	Calcium silicon .
1383	135	Pyrophoric alloy, n.o.s.	1407	138	Caesium
1383	135	Pyrophoric metal, n.o.s.	1407	138	Cesium
1384	135	Sodium dithionite	1408	139	Ferrosilicon
1384	135	Sodium hydrosulfite	1409	138	Hydrides, metal, n.o.s.
1384	135	Sodium hydrosulphite	1409	138	Metal hydrides, water-reactive,
1385	135	Sodium sulfide, anhydrous			n.o.s.
1385	135	Sodium sulfide, with less than 30% water of crystallization			Lithium aluminum hydride
1385	135		1411	138	Lithium aluminum hydride, ethereal
1385	135	Sodium sulphide, with less than	1412	139	Lithium amide
4000	425	30% water of crystallization	1413	138	Lithium borohydride
1386	135	Seed cake, with more than 1.5% oil and not more than 11%	1414	138	Lithium hydride
100		moisture	1415	138	Lithium
					Page 27

No. No.	No. No.
1417 138 Lithium silicon	1447 141 Barium perchlorate
1418 138 Magnesium alloys powder	1448 141 Barium permanganate
1418 138 Magnesium powder	1449 141 Barium peroxide
1419 139 Magnesium aluminum phosphide	1450 141 Bromates, inorganic, n.o.s.
1420 138 Potassium, metal alloys	1451 140 Caesium nitrate
1420 138 Potassium, metal liquid alloy	1451 140 Cesium nitrate
1421 138 Alkali metal alloy, liquid, n.o.s.	1452 140 Calcium chlorate
1422 138 Potassium sodium alloys	1453 140 Calcium chlorite
1422 138 Sodium potassium alloys	1454 140 Calcium nitrate
1423 <b>138</b> Rubidium	1455 140 Calcium perchlorate
1423 138 Rubidium metal	1456 140 Calcium permanganate
1426 138 Sodium borohydride	1457 140 Calcium peroxide
1427 138 Sodium hydride	1458 140 Borate and Chlorate mixtures
1428 <b>138</b> Sodium	1458 140 Chlorate and Borate mixtures
1431 138 Sodium methylate	1459 140 Chlorate and Magnesium
1431 138 Sodium methylate, dry	chloride mixture
1432 139 Sodium phosphide	1459 <b>140</b> Magnesium chloride and Chlorate mixture
1433 139 Stannic phosphides	1461 140 Chlorate, n.o.s., wet
1435 <b>138</b> Zinc ashes	1461 140 Chlorates, inorganic, n.o.s.
1435 138 Zinc dross	1462 143 Chlorites, inorganic, n.o.s.
1435 138 Zinc residue	1463 141 Chromic acid, solid
1435 138 Zincskimmings	1463 141 Chromic acid mixture, dry
1436 138 Zinc dust	1463 141 Chromium trioxide, anhydrous
1436 138 Zinc powder	1465 140 Didymium nitrate
1437 138 Zirconium hydride	1466 140 Ferric nitrate
1438 140 Aluminum nitrate	1467 143 Guanidine nitrate
1439 141 Ammonium dichromate	1469 <b>141</b> Lead nitrate
1442 143 Ammonium perchlorate	1470 141 Lead perchlorate
1444 140 Ammonium persulfate	1470 141 Lead perchlorate, solid
1444 140 Ammonium persulphate	1470 141 Lead perchlorate, solution
1445 141 Barium chlorate	1471 140 Lithium hypochlorite, dry
1445 141 Barium chlorate, wet	1471 140 Lithium hypochlorite mixture
1446 141 Barium nitrate	

No.	No.	Vio. 107	No.	No.	10 mil
1471	140	Lithium hypochlorite mixtures,	1489	140	Potassium perchlorate
		dry	1490	140	Potassium permanganate
1472	143	Lithium peroxide	1491	144	Potassium peroxide
1473	140	Magnesium bromate	1492	140	Potassium persulfate
1474		Magnesium nitrate	1492	140	Potassium persulphate
1475	140	Magnesium perchlorate	1493	140	Silver nitrate
1476	140	Magnesium peroxide	1494	141	Sodium bromate
1477	140	Ammonium sulfate nitrate	1495	140	Sodium chlorate
1477	140	Ammonium sulphate nitrate	1496	143	Sodium chlorite
1477	140	Nitrate, n.o.s.	1498	140	Sodium nitrate
1477	140	Nitrates, inorganic, n.o.s.	1499	140	Potassium nitrate and Sodium
1479	140	Compound, tree or weed killing,			nitrate mixture
4.470	440	solid (oxidizer)	1499	140	Sodium nitrate and Potassium
	140	Cosmetics, n.o.s.	4500	440	nitrate mixture
1479		Drugs, n.o.s.			Sodium nitrite
1479	140	Medicines, oxidizing substances, solid, n.o.s.	1502		Sodium perchlorate
1479	140	Oxidizing solid, n.o.s.	1503		Sodium permanganate
1479		Oxidizing substances, solid,	1504		Sodium peroxide
M -	2111	n.o.s.	1505		Sodium persulfate
1481	140	Perchlorate, n.o.s.	1505		Sodium persulphate
1481	140	Perchlorates, inorganic, n.o.s.	1506	0.05	Strontium chlorate
1482	140	Permanganate, n.o.s.	1506		Strontium chlorate, solid
1482	140	Permanganates, inorganic,	1506	311	Strontium chlorate, solution
Distr.		n.o.s.	1507		Strontium nitrate
1483	140	Peroxides, inorganic, n.o.s.	1508		Strontium perchlorate
1484	140	Potassium bromate	1509	1111	Strontium peroxide
1485	140	Potassium chlorate	1510	143	Tetranitromethane
1486	140	Potassium nitrate	1511	140	Urea hydrogen peroxide
1487	140	Potassium nitrate and Sodium	1511	140	Urea peroxide
1407	440	nitrite mixture	1512		Zinc ammonium nitrite
1487	140	Sodium nitrite and Potassium nitrate mixtures	1513		Zinc chlorate
1487	140	Sodium nitrite mixture	1514		Zinc nitrate
1488	-	Potassium nitrite	1515	140	Zinc permanganate
1.00		- C.C. SOIGHI HILLIO			Page 29

ID Guide Name of Material ID Guide Name of Material

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
1516 143 Zinc peroxide	1557 152 Arsenic sulfide
1517 113 Zirconium picramate, wetted	1557 152 Arsenic sulphide
with not less than 20% wate	1557 152 Arsenic trisuitide
1541 155 Acetone cyanohydrin, stabilize	1557 <b>152</b> Arsenic trisulphide
1544 <b>151</b> Alkaloids, solid, n.o.s. (poisonous)	1558 <b>152</b> Arsenic
1544 <b>151</b> Alkaloid salts, solid, n.o.s. (poisonous)	1559 151 Arsenic pentoxide 1560 157 Arsenic chloride
1545 <b>155</b> Allyl isothiocyanate, inhibited	1560 157 Arsenic trichloride
1545 155 Allyl isothiocyanate, stabilized	1561 151 Arsenic trioxide
1546 151 Ammonium arsenate	1562 152 Arsenical dust
1547 <b>153</b> Aniline	1564 154 Barium compound, n.o.s.
1548 153 Aniline hydrochloride	1565 157 Barium cyanide
1549 157 Antimony compound, inorganic	1566 <b>154</b> Beryllium chloride
n.o.s.	1566 154 Beryllium compound, n.o.s.
1549 157 Antimony compound, inorganic	1566 154 Beryllium fluoride
solid, n.o.s.	1567 134 Beryllium powder
1549 157 Antimony tribromide, solid	1569 131 Bromoacetone
1549 157 Antimony tribromide, solution	1570 <b>152</b> Brucine
1549 157 Antimony trifluoride, solid	1571 113 Barium azide, wetted with not
1549 157 Antimony trifluoride, solution	less than 50% water
1550 151 Antimony lactate	1572 151 Cacodylic acid
1551 151 Antimony potassium tartrate	1573 151 Calcium arsenate
1553 154 Arsenic acid, liquid	1574 151 Calcium arsenate and Calcium arsenite mixture, solid
1554 154 Arsenic acid, solid	1574 151 Calcium arsenite, solid
1555 151 Arsenic bromide	4574 454 Oalaina annaite an LOalai
1556 152 Arsenic compound, liquid, n.o.	arsenate mixture, solid
1556 <b>152</b> Arsenic compound, liquid, n.o.s., inorganic	1575 157 Calcium cyanide
1556 152 Methyldichloroarsine	1577 153 Chlorodinitrobenzenes
1556 152 Phenyldichloroarsine	1577 153 Dinitrochlorobenzene
1557 152 Arsenic compound, solid, n.o.s	1578 <b>152</b> Chloronitrobenzenes
1557 152 Arsenic compound, solid, n.o.s	4570 450 011 11 1
inorganic	1578 152 Chloronitrobenzenes, solid
1557 152 Arsenic iodide, solid	1578 152 Nitrochlorobenzenes, liquid
Page 30	

No.	No.	44 444	No.	No.	420 500
1578	152	Nitrochlorobenzenes, solid	1595	156	Dimethyl sulphate
1579	153	4-Chloro-o-toluidine	1596	153	Dinitroanilines
		hydrochloride	1597	152	Dinitrobenzenes
1580	154	Chloropicrin	1598	153	Dinitro-o-cresol
1581	123	Chloropicrin and Methyl bromide mixture	1599	153	Dinitrophenol, solution
1581	123	Methyl bromide and Chloropicrin	1600	152	Dinitrotoluenes, molten
		mixtures	1601	151	Disinfectant, solid, poisonous, n.o.s.
1581	123	Methyl bromide and more than 2% Chloropicrin mixture,	1601	151	Disinfectant, solid, toxic, n.o.s.
		liquid	1601	151	Disinfectants, solid, n.o.s.
1582	119	Chloropicrin and Methyl chloride	100		(poisonous)
		mixture	1602		Dye, liquid, poisonous, n.o.s.
1582	119	Methyl chloride and Chloropicrin mixtures	1602	151	Dye, liquid, toxic, n.o.s.
1583	154	Chloropicrin, absorbed	1602	151	Dye intermediate, liquid, poisonous, n.o.s.
	154	Chloropicrin mixture, n.o.s.	1602	151	Dye intermediate, liquid, toxic,
1584		Cocculus		М.	n.o.s.
1585	151	Copper acetoarsenite	1603	155	Ethyl bromoacetate
1586	151	Copper arsenite	1604	132	Ethylenediamine
1587	151	Copper cyanide	1605	154	Ethylene dibromide
1588	157	Cyanides, inorganic, n.o.s.	1606	151	Ferric arsenate
1588	157	Cyanides, inorganic, solid,	1607	151	Ferric arsenite
1		n.o.s.	1608		Ferrous arsenate
1589	125	Cyanogen chloride, inhibited	1610	159	Halogenated irritating liquid, n.o.s.
1590	153	Dichloroanilines  Dichloroanilines	1611	151	Hexaethyl tetraphosphate
1590 1590	153	Dichloroanilines, liquid	1611	151	Hexaethyl tetraphosphate, liquid
1590	153 152	Dichloroanilines, solid o-Dichlorobenzene	1611	151	Hexaethyl tetraphosphate, solid
1591		p-Dichlorobenzene	1612		Hexaethyl tetraphosphate and
1592					compressed gas mixture
1593		Dichloromethane Methylene chloride	1613	154	Hydrocyanic acid, aqueous
1594		Diethyl sulfate			solution, with less than 5% Hydrogen cyanide
1594		Diethyl sulphate	1613	154	Hydrocyanic acid, aqueous
1595		Dimethyl sulfate	,5,5		solution, with not more than
			_		20% Hydrogen cyanide Page 31

ID Guide Name of Material

ID Guide Name of Material

1613 154 Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide  1614 131 Hydrogen cyanide, anhydrous, stabilized (absorbed)  1614 131 Hydrogen cyanide, stabilized (absorbed)  1641 151 Mercury oxide  1642 151 Mercury oxycyanide, desensitized  1643 151 Mercury potassium iodide  1644 151 Mercury potassium iodide
20% Hydrogen cyanide  1614 131 Hydrogen cyanide, anhydrous, stabilized (absorbed)  1614 131 Hydrogen cyanide, stabilized (absorbed)  1642 151 Mercury oxycyanide, desensitized  1643 151 Mercury potassium iodide  1644 151 Mercury salicylate
1614 131 Hydrogen cyanide, anhydrous, stabilized (absorbed)  1614 131 Hydrogen cyanide, stabilized (absorbed)  1643 151 Mercury oxycyanide, desensitized  1643 151 Mercury potassium iodide  1644 151 Mercury salicylate
1614 131 Hydrogen cyanide, stabilized (absorbed)  1643 151 Mercury potassium iodide 1644 151 Mercury salicylate
(absorbed) 1644 151 Mercury salicylate
1616 151 Lead acetate 1645 151 Mercuric sulfate
1617 151 Lead arsenates 1645 151 Mercuric sulphate
1618 151 Lead arsenites 1645 151 Mercury sulfate
1620 151 Lead cyanide 1645 151 Mercury sulphate
1621 151 London purple 1646 151 Mercury thiocyanate
1622 151 Magnesium arsenate  1623 151 Mercuric arsenate  1647 151 Ethylene dibromide and Methy bromide mixture, liquid
1647 151 Methyl bromide and Ethylene
1625 444 Marauria nitrata
1648 131 ACCIONITIE
1607 444 Margurage pitrote
1649 131 Motor fuer anti-knock compoun
1639 151 Motor fuel anti-knock mixture
1620 454 Maraury contate
1620 154 Marausy ammanium ahlarida
1621 154 Marausy hanzasta
1622 454 Margury kigulfata
1002 100 Naphthyluled
1624 4EA Marcusia bramida
1634 151 Nicotille
1635 151 Nicotine compound, solid, n.o.
1636 154 Mercuric cyanide 1655 151 Nicotine preparation, solid, n.o.s.
1636 154 Mercury cyanide 1656 151 Nicotine hydrochloride 1637 151 Mercury gluconate 1656 151 Nicotine hydrochloride, solutio
1638 151 Mercury iodide 1657 151 Nicotine salicylate
1639 151 Mercury nucleate 1658 151 Nicotine sulfate, solid
1640 151 Mercury oleate 1658 151 Nicotine sulfate, solution
Page 32

ID No.	Guid No.		ID No.	Guid No.	
1658	151	Nicotine sulphate, solid	1690	154	Sodium fluoride, solution
1658	151	Nicotine sulphate, solution	1691	151	Strontium arsenite
1659	151	Nicotine tartrate	1692	151	Strychnine
1660	124	Nitric oxide	1692	151	Strychnine salts
1660	124	Nitric oxide, compressed	1693	159	Irritating agent, n.o.s.
1661	153	Nitroanilines	1693	159	ORM-A, n.o.s.
1662	152	Nitrobenzene	1693	159	Tear gas devices
1663	153	Nitrophenols	1693	159	Tear gas substance, liquid,
1664	152	Nitrotoluenes			n.o.s.
1664	152	Nitrotoluenes, liquid	1693		Tear gas substance, solid, n.o.s.
1664	152	Nitrotoluenes, solid	1694	159	Bromobenzyl cyanides
1665	152	Nitroxylenes	1695	131	Chloroacetone, stabilized
1665	152	Nitroxylol	1697	153	Chloroacetophenone
1669	151	Pentachloroethane	1697	153	Chloroacetophenone, liquid
1670	157	Perchloromethyl mercaptan	1697	153	Chloroacetophenone, solid
1671	153	Phenol, solid	1698	154	Diphenylamine chloroarsine
1672	151	Phenylcarbylamine chloride	1699	151	Diphenylchloroarsine
1673	153	Phenylenediamines	1699	151	Diphenylchloroarsine, liquid
1674	151	Phenylmercuric acetate	1699	151	Diphenylchloroarsine, solid
1677	151	Potassium arsenate	1700	159	Tear gas grenades
1678	154	Potassium arsenite	1701	152	Xylyl bromide
1679	157	Potassium cuprocyanide	1702	151	1,1,2,2-Tetrachloroethane
1680	157	Potassium cyanide	1702	151	Tetrachloroethane
1683		Silver arsenite	1703	123	Tetraethyl dithiopyrophosphate
1684	151	Silver cyanide	_		and gases, in solution
1685	151	Sodium arsenate	1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures
1686	154	Sodium arsenite, aqueous solution	1703	123	Tetraethyl dithiopyrophosphate
1687	153	Sodium azide			and gases, mixtures, or in solution (LC50 more than 200
1688		Sodium cacodylate			ppm but not more than 5000
1689		Sodium cyanide	4700		ppm)
1690		Sodium fluoride	1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures, or in
1690		Sodium fluoride, solid			solution (LC50 not more than 200 ppm)
					Page 33

ID No	Gui . No		ID No.	Gui	
170	4 153	Tetraethyl dithiopyrophosphate			Butyl acid phosphate
	4 153		1719		Alkaline liquid, n.o.s.
		mixture, dry or liquid			Caustic alkali liquid, n.o.s.
170	5 123	Tetraethyl pyrophosphate and compressed gas mixtures	1722	155	Allyl chlorocarbonate
170	5 422		1722	155	Allyl chloroformate
170	123	Tetraethyl pyrophosphate and compressed gas mixtures	1723	132	Allyl iodide
		(LC50 more than 200 ppm but	1724	155	Allyltrichlorosilane, stabilized
1	_	not more than 5000 ppm)	1725	137	Aluminum bromide, anhydrous
170	5 123	Tetraethyl pyrophosphate and compressed gas mixtures	1726	137	Aluminum chloride, anhydrous
		(LC50 not more than 200 ppm)	1727	154	Ammonium bifluoride, solid
170	7 151	Thallium compound, n.o.s.	1727	154	, ,
170	7 151	Thallium sulfate, solid			solid
170	7 151	Thallium sulphate, solid	1727	154	Ammonium hydrogen fluoride, solid
170	8 153	Toluidines	1728	155	Amyltrichlorosilane
170	8 153	Toluidines, liquid	1729		Anisoyl chloride
170	8 153	Toluidines, solid	1730		Antimony pentachloride, liquid
170	9 151	2,4-Toluenediamine	1731		Antimony pentachloride,
170	9 151	Toluenediamine			solution
170	9 151	2,4-Toluylenediamine	1732	157	Antimony pentafluoride
171	0 160	Trichloroethylene	1733	157	Antimony trichloride
171	1 153	Xylidines	1733	157	Antimony trichloride, liquid
171	2 151	Zinc arsenate	1733	157	Antimony trichloride, solid
171	2 151		1733	157	Antimony trichloride, solution
H.E.		mixture	1736	137	Benzoyl chloride
	2 151	Zinc arsenite	1737	156	Benzyl bromide
1/1	2 151	Zinc arsenite and Zinc arsenate mixture	1738	156	Benzyl chloride
171	3 151	Zinc cyanide	1739	137	Benzyl chloroformate
171	4 139	Zinc phosphide	1740	154	Bifluorides, n.o.s.
171	5 137	Acetic anhydride	1740		Hydrogendifluorides, n.o.s.
171	6 156	Acetyl bromide	_	125	Boron trichloride
171	7 132	Acetyl chloride	1742	155	Boron trifluoride acetic acid
171	8 153	Acid butyl phosphate			complex

No.	No	40 .00	No.	No	
1743	156	Boron trifluoride propionic acid	1759	154	Ferrous chloride, solid
914		complex	1759	154	Medicines, corrosive, solid,
1744	154	Bromine	150		n.o.s.
1744	154	Bromine, solution	1759	154	Stannous chloride, solid
1745	144	Bromine pentafluoride	1760	154	Acid, liquid, n.o.s.
1746	144	Bromine trifluoride	1760	154	Aluminum phosphate, solution
1747	155	Butyltrichlorosilane	1760	154	Aluminum sulfate, solution
1748	140	Calcium hypochlorite, dry	1760	154	Aluminum sulphate, solution
1748	140	Calcium hypochlorite mixture,	1760	154	2-(2-Aminoethoxy)ethanol
		dry, with more than 39% available Chlorine (8.8%	1760	154	Aminopropyldiethanolamine
1		available Oxygen)	1760	154	N-Aminopropylmorpholine
1749	124	Chlorine trifluoride	1760	154	Chemical kit
1750	153	Chloroacetic acid, liquid	1760	154	1 1 3
1750	153	Chloroacetic acid, solution		14.	(corrosive)
1751	153	Chloroacetic acid, solid	1760	154	Compound, rust removing (corrosive)
1752	156	Chloroacetyl chloride	1760	154	Compound, tree or weed killing,
1753	156	Chlorophenyltrichlorosilane	300		liquid (corrosive)
1754	137	Chlorosulfonic acid	1760	154	Compound, vulcanizing, liquid
1754	137	Chlorosulfonic acid and Sulfur	4700	14	(corrosive)
4754	407	trioxide mixture	1760	154	Compounds, cleaning, liquid (corrosive)
1754		Chlorosulphonic acid	1760	154	Corrosive liquid, n.o.s.
1754	137	Chlorosulphonic acid and Sulphur trioxide mixture	1760		Cosmetics, liquid, n.o.s.
1754	137	Sulfur trioxide and	1760	154	2,2-Dichloropropionic acid
		Chlorosulfonic acid mixture	1760	154	Drugs, liquid, n.o.s.
1754	137	Sulphur trioxide and	1760	154	Ferrous chloride, solution
		Chlorosulphonic acid mixture	1760	154	Flame retardant compound,
1755		Chromic acid, solution			liquid (corrosive)
1756		Chromic fluoride, solid	1760	154	Hexanoic acid
1757		Chromic fluoride, solution	1760	154	Isopentanoic acid
1758		Chromium oxychloride	1760	154	Medicines, corrosive, liquid,
1759		Corrosive solid, n.o.s.			n.o.s.
1759		Cosmetics, solid, n.o.s.	1760		Morpholine, aqueous mixture
1759	154	Drugs, solid, n.o.s.	1760	154	Nitric acid, 40% or less
					Page 3

ID Guide Name of Material ID Guide Name of Material

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
1760 <b>154</b> ORM-B, n.o.s.	1779 <b>153</b> Formic acid
1760 154 Paint (corrosive)	1780 156 Fumaryl chloride
1760 154 Paint related material	1781 156 Hexadecyltrichlorosilane
(corrosive)	1782 <b>154</b> Hexafluorophosphoric acid
1760 <b>154</b> Textile treating compound or mixture, liquid (corrosive)	1783 <b>153</b> Hexamethylenediamine, solution
1760 <b>154</b> Titanium sulfate, solution	1784 156 Hexyltrichlorosilane
1760 <b>154</b> Titanium sulphate, solution	1786 157 Hydrofluoric acid and Sulfuric
1761 <b>154</b> Cupriethylenediamine, solution	acid mixture
1762 156 Cyclohexenyltrichlorosilane	1786 157 Hydrofluoric acid and Sulphuric
1763 156 Cyclohexyltrichlorosilane	acid mixture
1764 153 Dichloroacetic acid	1786 157 Sulfuric acid and Hydrofluoric acid mixtures
1765 156 Dichloroacetyl chloride	1786 157 Sulphuric acid and Hydrofluoric
1766 <b>156</b> Dichlorophenyltrichlorosilane	acid mixtures
1767 155 Diethyldichlorosilane	1787 154 Hydriodic acid
1768 <b>154</b> Difluorophosphoric acid, anhydrous	1787 154 Hydriodic acid, solution
1769 156 Diphenyldichlorosilane	1788 154 Hydrobromic acid
1770 153 Diphenylmethyl bromide	1788 154 Hydrobromic acid, solution
1771 156 Dodecyltrichlorosilane	1789 157 Compound, cleaning liquid
1773 157 Ferric chloride	(containing Hydrochloric (muriatic) acid)
1773 157 Ferric chloride, anhydrous	1789 157 Hydrochloric acid
1774 154 Fire extinguisher charges,	1789 157 Hydrochloric acid, mixture
corrosive liquid	1789 157 Hydrochloric acid, solution
1775 154 Fluoboric acid	1789 157 Muriatic acid
1775 154 Fluoroboric acid	1790 157 Compound, cleaning liquid
1776 154 Fluorophosphoric acid,	(containing Hydrofluoric acid)
anhydrous	1790 157 Etching acid, liquid, n.o.s.
1777 137 Fluorosulfonic acid	1790 157 Hydrofluoric acid
1777 137 Fluorosulphonic acid	1790 157 Hydrofluoric acid, solution
1778 154 Fluorosilicic acid	1791 154 Hypochlorite solution
1778 154 Fluosilicic acid	1791 <b>154</b> Hypochlorite solution, with more
1778 <b>154</b> Hydrofluorosilicic acid	than 5% available Chlorine
1778 154 Hydrofluosilicic acid	1792 157 Iodine monochloride
Page 26	

ID No.	Gui No		ID No.	Guid No.	
1793	153	Isopropyl acid phosphate	1814	154	Caustic potash, solution
1794	154	Lead sulfate, with more than 3%	1814	154	Potassium hydroxide, solution
		free acid	1815	132	Propionyl chloride
1794	154	Lead sulphate, with more than 3% free acid	1816	155	Propyltrichlorosilane
1796	157	Nitrating acid mixture	1817	137	Pyrosulfuryl chloride
	157	Aqua regia	1817	137	Pyrosulphuryl chloride
	157	Nitrohydrochloric acid	1818	156	Silicon tetrachloride
1799		Nonyltrichlorosilane	1819	154	Sodium aluminate, solution
	156	Octadecyltrichlorosilane	1821	154	Sodium bisulfate, solid
1801		Octyltrichlorosilane	1821	154	Sodium bisulphate, solid
1802		Perchloric acid, with not more	1821	154	Sodium hydrogen sulfate, solid
1002	140	than 50% acid	1821	154	Sodium hydrogen sulphate, solid
1803	153	Phenolsulfonic acid, liquid	1823	154	Caustic soda, bead
1803	153	Phenolsulphonic acid, liquid	1823	154	Caustic soda, flake
1804	156	Phenyltrichlorosilane	1823	154	Caustic soda, granular
1805	154	Phosphoric acid	1823	154	Caustic soda, solid
1806	137	Phosphorus pentachloride	1823	154	Sodium hydroxide, dry
1807	137	Phosphoric anhydride	1823	154	Sodium hydroxide, bead
1807	137	Phosphorus pentoxide	1823	154	Sodium hydroxide, flake
1808	137	Phosphorus tribromide	1823	154	Sodium hydroxide, granular
1809	137	Phosphorus trichloride	1823	154	Sodium hydroxide, solid
1810	137	Phosphorus oxychloride	1824	154	Caustic soda, solution
1811	154	Potassium bifluoride	1824	154	Sodium hydroxide, solution
1811	154	Potassium hydrogendifluoride	1825	157	Sodium monoxide
1811	154	Potassium hydrogen fluoride,	1826	157	Nitrating acid, spent
		solution	1826	157	Nitrating acid mixture, spent
1812		Potassium fluoride	1827	137	Stannic chloride, anhydrous
		Battery	1827	137	Tin tetrachloride
1813		Caustic potash, dry, solid	1828	137	Sulfur chlorides
1813		Potassium hydroxide, dry, solid	1828	137	Sulphur chlorides
		Potassium hydroxide, flake	1829	137	Sulfur trioxide
1813		Potassium hydroxide, solid	1829	137	Sulfur trioxide, inhibited
1814	154	Caustic potash, liquid	1829	137	Sulfur trioxide, stabilized
					Page 37

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
1829 137 Sulfur trioxide, uninhibited	1834 137 Sulfuryl chloride
1829 137 Sulphur trioxide	1834 137 Sulphuryl chloride
1829 137 Sulphur trioxide, inhibited 1829 137 Sulphur trioxide, stabilized	1835 153 Tetramethylammonium hydroxide
1829 137 Sulphur trioxide, uninhibited	1836 137 Thionyl chloride
1830 137 Sulfuric acid	1837 157 Thiophosphoryl chloride
1830 137 Sulfuric acid, with more than 51% acid	1838 137 Titanium tetrachloride 1839 153 Trichloroacetic acid
1830 137 Sulphuric acid	1840 154 Zinc chloride, solution
1830 137 Sulphuric acid, with more than	1841 171 Acetaldehyde ammonia
51% acid	1843 141 Ammonium dinitro-o-cresolate
1831 <b>137</b> Oleum	1845 120 Carbon dioxide, solid
1831 137 Oleum, with less than 30% free	1845 <b>120</b> Dry ice
Sulfur trioxide	1846 151 Carbon tetrachloride
1831 <b>137</b> Oleum, with less than 30% free Sulphur trioxide	1847 153 Potassium sulfide, hydrated, with not less than 30% water
1831 137 Oleum, with not less than 30% free Sulfur trioxide	of crystallization
1831 137 Oleum, with not less than 30% free Sulphur trioxide	1847 <b>153</b> Potassium sulfide, hydrated, with not less than 30% water of hydration
1831 137 Sulfuric acid, fuming	1847 153 Potassium sulphide, hydrated,
1831 137 Sulfuric acid, fuming, with less than 30% free Sulfur trioxide	with not less than 30% water of crystallization
1831 <b>137</b> Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide	1847 153 Potassium sulphide, hydrated, with not less than 30% water of hydration
1831 137 Sulphuric acid, fuming	1848 132 Propionic acid
1831 137 Sulphuric acid, fuming, with less than 30% free Sulphur trioxide	1849 153 Sodium sulfide, hydrated, with not less than 30% water
1831 137 Sulphuric acid, fuming, with not less than 30% free Sulphur	1849 153 Sodium sulphide, hydrated, with not less than 30% water
trioxide	1851 <b>151</b> Medicine, liquid, poisonous,
1832 137 Sulfuric acid, spent	n.o.s.
1832 137 Sulphuric acid, spent	1851 151 Medicine, liquid, toxic, n.o.s.
1833 154 Sulfurous acid	1854 135 Barium alloys, pyrophoric
1833 154 Sulphurous acid	1855 135 Calcium, metal and alloys, pyrophoric
Page 38	

No.	No.	, T	No.	No. No.			
1855	135	Calcium, pyrophoric	1888	151	Chloroform		
1855	135	Calcium alloys, pyrophoric	1889	157	Cyanogen bromide		
1856	133	Rags, oily	1891	131	Ethyl bromide		
1858	126	Hexafluoropropylene	1892	151	Ethyldichloroarsine		
1858	126	Refrigerant gas R-1216	1894	151	Phenylmercuric hydroxide		
1859	125	Silicon tetrafluoride	1895	151	Phenylmercuric nitrate		
1859	125	Silicon tetrafluoride,	1897	160	Perchloroethylene		
1000	4405	compressed	1897	160	Tetrachloroethylene		
		Vinyl fluoride, inhibited	1898	156	Acetyl iodide		
1862		Ethyl crotonate	1902	153			
		Fuel, aviation, turbine engine	4000		acid		
1864		Gas drips, hydrocarbon	1902				
1865		n-Propyl nitrate	1903	153	Disinfectant, liquid, corrosive, n.o.s.		
1866		Resin solution	1903	153	Disinfectants, corrosive, liquid,		
1867		Cigarettes, self-lighting			n.o.s.		
1868		Decaborane	1905	154	Selenic acid		
1869		Magnesium	1906	153	Acid, sludge		
1869	138	Magnesium, in pellets, turnings or ribbons	1906	153	Sludge acid		
1869	138	Magnesium alloys, with more than 50% Magnesium, in	1907	154	Soda lime, with more than 4% Sodium hydroxide		
		pellets, turnings or ribbons	1908	154	Chlorite solution		
1869	138	Magnesium scrap	1908	154			
1870	138	Potassium borohydride	4000		5% available Chlorine		
1871	170	Titanium hydride	1908	154	Sodium chlorite, solution, with more than 5% available		
1872	141	Lead dioxide			Chlorine		
1872	141	Lead peroxide	1910	157	Calcium oxide		
1873	143	Perchloric acid, with more than	1911	119	Diborane		
		50% but not more than 72% acid	1911	119	Diborane, compressed		
1884	157	Barium oxide	1911	119	Diborane mixtures		
1885	153	Benzidine	1912	115			
1886	156	Benzylidene chloride	115	-111	chloride mixture		
1887		Bromochloromethane	1912	115	Methylene chloride and Methyl chloride mixture		
		6.75			S.HOTTAG HILKATO		

ID

**Guide Name of Material** 

ID

	Duide Name of Material	ID Guide Name of Material No. No.
1913 1 1914 1	(cryogenic liquid)	1942 <b>140</b> Ammonium nitrate, with not more than 0.2% combustible substances
1915 1	27 Cyclohexanone	1942 140 Ammonium nitrate, with organic coating
1916 1 1917 1 1918 1 1918 1 1919 1	31 Isopropylbenzene 29P Methyl acrylate, inhibited	1944 133 Matches, safety 1945 133 Matches, wax "vesta" 1950 126 Aerosol dispensers 1950 126 Aerosols 1951 120 Argon, refrigerated liquid (cryogenic liquid)
	<ul><li>128 Nonanes</li><li>131P Propyleneimine, inhibited</li><li>132 Pyrrolidine</li></ul>	1952 126 Carbon dioxide and Ethylene oxide mixtures, with not more than 6% Ethylene oxide
1923 1 1923 1	35 Calcium dithionite	1952 <b>126</b> Carbon dioxide and Ethylene oxide mixtures, with not more than 9% Ethylene oxide
1923 1 1928 1		1952 126 Ethylene oxide and Carbon dioxide mixtures, with not more than 6% Ethylene oxide
1929 1 1929 1	35 Potassium dithionite 35 Potassium hydrosulfite	1952 126 Ethylene oxide and Carbon dioxide mixtures, with not more than 9% Ethylene oxide
1931 1	<ul><li>71 Zinc dithionite</li><li>71 Zinc hydrosulfite</li></ul>	1953 119 Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)
	71 Zinc hydrosulphite	1953 119 Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)
1935 1 1938 1 1938 1	56 Bromoacetic acid	1953 119 Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)
1938 1	The same of the sa	1953 119 Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)
1940 1	<ul><li>137 Phosphorus oxybromide, solid</li><li>153 Thioglycolic acid</li><li>159 Dibromodifluoromethane</li></ul>	1953 <b>119</b> Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)

No.	No.	the last	No.	No.	And the same
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)
1953		Compressed gas, poisonous, flammable, n.o.s.	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	1953	119	Liquefied gas, flammable, toxic, n.o.s.
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)
1953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)
1953		Compressed gas, toxic, flammable, n.o.s.	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)
1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	1953	119	Poisonous gas, flammable, n.o.s.
1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	1953		Poisonous liquid, flammable, n.o.s.
1953	119	Compressed gas, toxic,	1954	115	Compressed gas, flammable, n.o.s.
		flammable, n.o.s. (Inhalation Hazard Zone C)	1954	115	Dispersant gas, n.o.s. (flammable)
1953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	1954		Insecticide gas, flammable, n.o.s.
1953	119	Liquefied gas, flammable,	1954		Liquefied gas, flammable, n.o.s.
		poisonous, n.o.s.	1954	115	Refrigerant gas, n.o.s. (flammable)

ID Guide Name of Material ID Guide Name of Material

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
1954 115 Refrigerating machines, containing flammable, liquefied gas	1955 123 Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)
1954 115 Refrigerating machines, containing flammable, non-	1955 123 Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
poisonous, non-corrosive, liquefied gas	1955 123 Liquefied gas, toxic, n.o.s. 1955 123 Liquefied gas, toxic, n.o.s.
1955 123 Chloropicrin and non-flammable, non-liquefied compressed gas mixture	(Inhalation Hazard Zone A) 1955 123 Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)
1955 123 Compressed gas, poisonous, n.o.s.	1955 123 Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)
1955 <b>123</b> Compressed gas, poisonous, n.o.s. (Inhalation Hazard	1955 123 Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)
Zone A)  1955 123 Compressed gas, poisonous, n.o.s. (Inhalation Hazard	1955 123 Methyl bromide and nonflammable, nonliquefied compressed gas mixture
Zone B) 1955 123 Compressed gas, poisonous,	1955 123 Organic phosphate compound mixed with compressed gas
n.o.s. (Inhalation Hazard Zone C)	1955 123 Organic phosphate mixed with compressed gas
1955 123 Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	1955 123 Organic phosphorus compound mixed with compressed gas
1955 123 Compressed gas, toxic, n.o.s.	1955 <b>123</b> Poisonous gas, n.o.s.
1955 <b>123</b> Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	1955 123 Poisonous liquid, n.o.s. 1956 126 Accumulators, pressurized, pneumatic or hydraulic
1955 123 Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	1956 126 Compressed gas, n.o.s.
1955 123 Compressed gas, toxic, n.o.s.	1956 126 Hexafluoropropylene oxide
(Inhalation Hazard Zone C)	1956 126 Liquefied gas, n.o.s.
1955 123 Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	1956 126 Water pump system
1955 123 Liquefied gas, poisonous, n.o.s.	1957 115 Deuterium 1957 115 Deuterium, compressed
1955 123 Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	1958 126 1,2-Dichloro-1,1,2,2- tetrafluoroethane
1955 <b>123</b> Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	1958 126 Dichlorotetrafluoroethane 1958 126 Refrigerant gas R-114
	1900 120 Nemyerant gas N-114

ID No.	Guid No.		ID No.	Guid No.	
1959	116P	1,1-Difluoroethylene	1971	115	Methane
1959	116P	Refrigerant gas R-1132a	1971	115	Methane, compressed
1960	115	Engine starting fluid	1971	115	Natural gas, compressed
1961	115	Ethane, refrigerated liquid	1972	115	Liquefied natural gas (cryogenic
1961	115	Ethane-Propane mixture, refrigerated liquid	1972	115	liquid) LNG (cryogenic liquid)
1961	115	Propane-Ethane mixture, refrigerated liquid	1972	115	Methane, refrigerated liquid (cryogenic liquid)
1962	116P	Ethylene	1972	115	Natural gas, refrigerated liquid
1962	116P	Ethylene, compressed			(cryogenic liquid)
1963	120	Helium, refrigerated liquid (cryogenic liquid)	1973	126	Chlorodifluoromethane and Chloropentafluoroethane mixture
1964	115	Hydrocarbon gas, compressed, n.o.s.	1973	126	
1964	115	Hydrocarbon gas mixture, compressed, n.o.s.	5100		mixture
1965	115	Hydrocarbon gas, liquefied,	1973	126	Refrigerant gas R-502
1905	113	n.o.s.	1974	126	Bromochlorodifluoromethane
1965	115	Hydrocarbon gas mixture,	1974	126	Chlorodifluorobromomethane
177		liquefied, n.o.s.			Refrigerant gas R-12B1
1966	115	Hydrogen, refrigerated liquid (cryogenic liquid)	1975	124	Dinitrogen tetroxide and Nitric oxide mixture
1967	123	Insecticide, liquefied gas, containing Poison A or	1975	124	Nitric oxide and Dinitrogen tetroxide mixture
1967	123	Poison B material Insecticide gas, poisonous,	1975	124	Nitric oxide and Nitrogen dioxide mixture
		n.o.s.	1975	124	Nitric oxide and Nitrogen
1967		Insecticide gas, toxic, n.o.s.	۱		tetroxide mixture
1967	123	Parathion and compressed gas mixture	1975	124	Nitrogen dioxide and Nitric oxide mixture
1968	126	Insecticide, liquefied gas	1975	124	Nitrogen tetroxide and Nitric
1968	126	Insecticide gas, n.o.s.	4070	400	oxide mixture
1969	115	Isobutane	1976		Octafluorocyclobutane
1969	115	Isobutane mixture	1976		Refrigerant gas RC-318
1970	120	Krypton, refrigerated liquid (cryogenic liquid)	1977	120	Nitrogen, refrigerated liquid (cryogenic liquid)

ID No.	Gui		ID No.	Guid No.	
1978	115	Propane	1987	127	Alcohols, n.o.s.
1978	115	Propane mixture	1987	127	Denatured alcohol
1979	-	Rare gases mixture	1988	131	Aldehydes, flammable, poisonous, n.o.s.
	121	Rare gases mixture, compressed Helium-Oxygen mixture	1988	131	Aldehydes, flammable, toxic,
1980	122	Oxygen and Rare gases mixture			n.o.s.
1980	122		1988		Aldehydes, poisonous, n.o.s.
		compressed	1988		Aldehydes, toxic, n.o.s.
1980	122	Rare gases and Oxygen mixture	1989		Aldehydes, n.o.s.
1980	122	Rare gases and Oxygen mixture,	1989	129	Benzaldehyde
		compressed	1990		Benzaldehyde
1981	121	Nitrogen and Rare gases mixture	1991	131F	Chloroprene, inhibited
1981	121	Nitrogen and Rare gases mixture, compressed	1992	131	Flammable liquid, poisonous, n.o.s.
1981	121	Rare gases and Nitrogen mixture	1992	131	Flammable liquid, toxic, n.o.s.
1981	121	Rare gases and Nitrogen	1993	128	Combustible liquid, n.o.s.
1982	126	mixture, compressed Refrigerant gas R-14,	1993	128	Compound, tree or weed killing, liquid (flammable)
		compressed	1993	128	Compounds, cleaning, liquid
1982	126	Tetrafluoromethane			(flammable)
1982	126	Tetrafluoromethane,	1993	128	Cosmetics, n.o.s.
		compressed	1993	128	Diesel fuel
1983		1-Chloro-2,2,2-trifluoroethane	1993	128	Disinfectant, liquid, n.o.s.
1983		Chlorotrifluoroethane	1993	128	Drugs, n.o.s.
1983	126	Refrigerant gas R-133a	1993	128	Ethyl nitrate
1984		Refrigerant gas R-23	1993	128	Flammable liquid, n.o.s.
1984	126	Trifluoromethane	1993	128	Fuel oil
1986	131	Alcohols, flammable, poisonous, n.o.s.	1993	128	Heater for refrigerator car, liquid fuel type
1986	131	Alcohols, flammable, toxic, n.o.s.	1993	128	Medicines, flammable, liquid, n.o.s.
1986	131	Alcohols, poisonous, n.o.s.	1993	128	Refrigerating machine
1986	131	Alcohols, toxic, n.o.s.	1994	131	Iron pentacarbonyl
1986	131	Denatured alcohol (toxic)	1999	130	Asphalt
1986	131	Propargyl alcohol	1999		Asphalt, cut back
Page 44	1		1000	130	Aspiralt, out back

No.	No.	Mar. Rep.	No.	No.	
1999	130	Tars, liquid	2017	159	Grenade, tear gas
2000	133	Celluloid, in blocks, rods, rolls,	2018	152	Chloroanilines, solid
1		sheets, tubes, etc., except scrap	2019	152	Chloroanilines, liquid
2001	133	Cobalt naphthenates, powder	2020	153	Chlorophenols, solid
2001		Celluloid, scrap	2020	153	Trichlorophenol
2002		Metal alkyls, n.o.s.	2021	153	Chlorophenols, liquid
2003		Metal aryls, n.o.s	2022	153	Cresylic acid
2003		Magnesium diamide	2022	153	Mining reagent, liquid
2005		Magnesium diphenyl	2023	131F	1-Chloro-2,3-epoxypropane
		Plastic, nitrocellulose-based,	2023	131F	P Epichlorohydrin
2000	133	spontaneously combustible,	2024	151	Mercury compound, liquid, n.o.s.
100		n.o.s.	2025	151	Mercury compound, solid, n.o.s.
2006	135	Plastics, nitrocellulose-based, self-heating, n.o.s.	2026	151	Phenylmercuric compound, n.o.s.
2008	135	Zirconium powder, dry	2027	151	Sodium arsenite, solid
2009	135	Zirconium, dry, finished sheets, strips or coiled wire	2028	153	Bombs, smoke, non-explosive, with corrosive liquid, without
2010	138	Magnesium hydride			initiating device
2011	139	Magnesium phosphide	2029		
2012	139	Potassium phosphide	2029	132	Hydrazine, aqueous solutions, with more than 64% Hydrazine
2013	139	Strontium phosphide	2030	153	Hydrazine, aqueous solution,
2014	140	Hydrogen peroxide, aqueous solution, with not less than			with not less than 37% but not more than 64% Hydrazine
		20% but not more than 60% Hydrogen peroxide (stabilized	2030	153	Hydrazine, aqueous solutions, with not more than 64%
0045		as necessary)	100		Hydrazine
2015	143	Hydrogen peroxide, aqueous solution, stabilized, with more	2030	153	Hydrazine hydrate
		than 60% Hydrogen peroxide	2031	157	Nitric acid, other than red fuming
2015	143	Hydrogen peroxide, stabilized	2031	157	Nitric acid, other than red
2016	151	Ammunition, poisonous, non-explosive			fuming, with more than 70% Nitric acid
2016	151	Ammunition, toxic, non-explosive	2031	157	Nitric acid, other than red fuming, with not more than
2017	159	Ammunition, tear-producing,			70% Nitric acid
2017	133	non-explosive	2032	157	Nitric acid, fuming
					Page 45

ID Guide Name of Material ID Guide Name of Material

ID No.	Gui		ID No.	Gui	de Name of Material
2032	157	Nitric ácid, red fuming	2055	128	Styrene monomer, inhibited
2033	154	Potassium monoxide	2056	127	Tetrahydrofuran
2034	115	Hydrogen and Methane mixture,	2057	128	Tripropylene
		compressed	2058	129	Valeraldehyde
2034	115	Methane and Hydrogen mixture, compressed		127	
2035	115	Refrigerant gas R-143a	2059	127	not less than 25% alcohol
2035	115	1,1,1-Trifluoroethane	2059	127	Nitrocellulose, colloided,
2035	115	Trifluoroethane, compressed	2000		granular or flake, wet, with not
2036	121	Xenon			less than 20% alcohol or solvent
2036	121	Xenon, compressed	2050	127	
2037	115	Gas cartridges	2039	121	flammable
2037	115	Receptacles, small, containing gas	2059	127	Nitrocellulose, solution, in a flammable liquid
2038	152	Dinitrotoluenes	2067	140	Ammonium nitrate fertilizers
2038	152	Dinitrotoluenes, liquid	2068	140	Ammonium nitrate fertilizers,
2038	152	Dinitrotoluenes, solid			with Calcium carbonate
2044	115	2,2-Dimethylpropane	2069	140	Ammonium nitrate fertilizers,
2045	129	Isobutyl aldehyde			with Ammonium sulfate
2045	129	Isobutyraldehyde	2069	140	Ammonium nitrate fertilizers, with Ammonium sulphate
2046	130	Cymenes	2069	140	Ammonium nitrate mixed
2047	132	Dichloropropenes	2003	170	fertilizers
2048	129	Dicyclopentadiene	2070	143	Ammonium nitrate fertilizers,
2049	130	Diethylbenzene			with Phosphate or Potash
2050	127	Diisobutylene, isomeric compounds	2071	140	Ammonium nitrate fertilizer, with not more than 0.4%
2051	132	2-Dimethylaminoethanol	0074		combustible material
2051	132	Dimethylethanolamine			Ammonium nitrate fertilizers
2052	128	Dipentene	2072	140	Ammonium nitrate fertilizer, n.o.s.
2053	129	Methylamyl alcohol	2072	140	Ammonium nitrate fertilizers
2053	129	Methyl isobutyl carbinol	2073		Ammonia, solution, with more
2053	129	M.I.B.C.			than 35% but not more than
2054	132	Morpholine			50% Ammonia
2054	132	Morpholine, aqueous mixture	2074	153P	Acrylamide
Page 46					

ID Guid No. No.			Gui No	de Name of Material
2075 153	Chloral, anhydrous, inhibited	2099	146	tert-Butyl monoperoxymaleate
2076 153	Cresols	2102	145	Di-tert-butyl peroxide
2077 <b>153</b> 2077 <b>153</b>	alpha-Naphthylamine Naphthylamine (alpha)	2103	146	tert-Butyl peroxyisopropyl carbonate
2077 155	Toluene diisocyanate	2104	145	tert-Butyl peroxyisononanoate
2079 154	Diethylenetriamine	2104	145	tert-Butyl peroxy-3,5,5-
	Acetyl acetone peroxide			trimethylhexanoate
	Acetyl benzoyl peroxide	2106	146	Di-(tert-butylperoxy)phthalate
1		2107	145	Di-(tert-butylperoxy)phthalate
2002 140	Acetyl cyclohexanesulfonyl peroxide	2108	145	Di-(tert-butylperoxy)phthalate
2082 148	Acetyl cyclohexanesulphonyl	2110	148	tert-Butyl peroxypivalate
	peroxide	2111	146	2,2-Di-(tert-butylperoxy)butane
2083 148	Acetyl cyclohexanesulfonyl peroxide	2112	145	1,3-Di-(2-tert-butylperoxy- isopropyl)benzene and
2083 148	Acetyl cyclohexanesulphonyl peroxide			1,4-Di-(2-tert-butylperoxy- isopropyl)benzene mixtures
2084 148	Acetyl peroxide	2112	145	1,4-Di-(2-tert-butylperoxy-
2085 <b>146</b> 2087 <b>146</b>	Benzoyl peroxide Benzoyl peroxide			isopropyl)benzene and 1,3-Di-(2-tert-butylperoxy- isopropyl)benzene mixtures
2088 146	Benzoyl peroxide	2113	146	
2089 145	Benzoyl peroxide	2114		p-Chlorobenzoyl peroxide
2090 146	Benzoyl peroxide	2115		
2091 145	tert-Butyl cumene peroxide	2116		
	tert-Butyl cumyl peroxide	2118		Cyclohexanone peroxide, not
	tert-Butyl isopropyl benzene			more than 72% in solution
2001 140	hydroperoxide	2119	147	Cyclohexanone peroxide, not
2092 147	tert-Butyl hydroperoxide, not more than 80% in Di-tert-butyl		19	more than 90%, with not less than 10% water
	peroxide and/or solvent	2120	148	Decanoyl peroxide
2093 147	tert-Butyl hydroperoxide	2121	145	Dicumyl peroxide
2094 147	tert-Butyl hydroperoxide	2122	148	Di-(2-ethylhexyl)-
2095 146	tert-Butyl peroxyacetate	J.A.		peroxydicarbonate
2096 146	tert-Butyl peroxyacetate	2123	148	Di-(2-ethylhexyl)- peroxydicarbonate
2097 146	tert-Butyl peroxybenzoate	2124	1/5	
2098 145	tert-Butyl peroxybenzoate			p-Menthane hydroperoxide
		2125	147	p-mentinane nydroperoxide  Page 47

ID G No. 1	Guide Name of Material No.	ID No.	Guid No.	
2126 1	47 Methyl isobutyl ketone peroxide	2150	148	Di-(sec-butyl)peroxydicarbonate
2128 <b>1</b>	48 Isononanoyl peroxide	2151	148	Di-(sec-butyl)peroxydicarbonate
2129 1	48 Caprylyl peroxide	2152	148	Dicyclohexyl peroxydicarbonate
2129 1	48 Caprylyl peroxide, solution	2153	148	Dicyclohexyl peroxydicarbonate
2129 1		2154	148	Di-(4-tert-butylcyclohexyl)- peroxydicarbonate
2130 1	48 Pelargonyl peroxide	2155	145	
2131 1	47 Peracetic acid, solution	2100	143	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexane
2131 1	47 Peroxyacetic acid, solution	2156	145	2,5-Dimethyl-2,5-di-(tert-
2132 1	48 Propionyl peroxide			butylperoxy)hexane
2133 1	48 Isopropyl percarbonate, unstabilized	2157	148	2,5-Dimethyl-2,5-di-(2-ethyl- hexanoylperoxy)hexane
2133 1	48 Isopropyl peroxydicarbonate	2158	146	2,5-Dimethyl-2,5-di-(tert-
2134 1	48 Isopropyl peroxydicarbonate			butylperoxy)hexyne-3
2135 1	46 Succinic acid peroxide	2159	145	2,5-Dimethyl-2,5-di-(tert-
2136 1	45 Tetralin hydroperoxide			butylperoxy)hexyne-3, with not more than 52% Peroxide in
2137 1	46 2,4-Dichlorobenzoyl peroxide			inert solid
2138 1	45 2,4-Dichlorobenzoyl peroxide	2160	145	1,1,3,3-Tetramethylbutyl
2139 1	45 2,4-Dichlorobenzoyl peroxide			hydroperoxide
2140 1	46 n-Butyl-4,4-di-(tert- butylperoxy)valerate	2161	148	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate
2141 1		2162	147	Pinane hydroperoxide
	butylperoxy)valerate	2163	148	Diacetone alcohol peroxides
2142 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2164	148	Dicetyl peroxydicarbonate
2143 1	48 tert-Butyl peroxy-2- ethylhexanoate	2165	146	3,3,6,6,9,9-Hexamethyl-1,2,4,5- tetraoxacyclononane
2144 1	48 tert-Butyl peroxydiethylacetate	2166	145	3,3,6,6,9,9-Hexamethyl-1,2,4,5-
2145 1	46 1,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	2167	445	tetraoxacyclononane
2146 1	1 1	2167	145	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane
	trimethyl cyclohexane	2168	145	2,2-Di-(4,4-di-tert-butyl-
2147 1				peroxycyclohexyl)propane
	trimethyl cyclohexane	2169	148	Butyl peroxydicarbonate
2148 1	45 Di-(1-hydroxycyclohexyl)- peroxide	2170	148	Butyl peroxydicarbonate
2149 1		2171	145	Diisopropylbenzene hydroperoxide
Daga 49				

ID No.	Guid No.			Guid No.	
2172	146	2,5-Dimethyl-2,5-di-	2193	126	Hexafluoroethane
e		(benzoylperoxy)hexane	2193	126	Hexafluoroethane, compressed
2173	145	2,5-Dimethyl-2,5-di- (benzoylperoxy)hexane	2193	126	Refrigerant gas R-116, compressed
2174	146	2,5-Dimethyl-2,5-dihydroperoxy hexane, not more than 82%	2194	125	Selenium hexafluoride
٠.		with water	2195	125	Tellurium hexafluoride
2174	146	Dimethylhexane	2196	125	Tungsten hexafluoride
		dihydroperoxide, with 18% or	2197	125	Hydrogen iodide, anhydrous
		more water	2198	125	Phosphorus pentafluoride
2175 2176	148 148	Diethyl peroxydicarbonate Di-n-propyl peroxydicarbonate	2198	125	Phosphorus pentafluoride, compressed
2177	148	tert-Butyl peroxyneodecanoate	2199	119	Phosphine
2178	146	2,2-Dihydroperoxypropane	2200	116F	Propadiene, inhibited
2179	146	1,1-Di-(tert-butylperoxy)- cyclohexane	2201	122	Nitrous oxide, refrigerated liquid
2100	446	AND RESIDENCE TO A SECOND SECO	2202	117	Hydrogen selenide, anhydrous
1 2180	140	1,1-Di-(tert-butylperoxy)- cyclohexane	2203	116	Silane
2182	148	Diisobutyryl peroxide	2203	116	Silane, compressed
2183			2204	119	Carbonyl sulfide
2184	146		2204	119	Carbonyl sulphide -
12		peroxy)butyrate	2205	153	Adiponitrile
2185	145	Ethyl-3,3-di-(tert-butyl- peroxy)butyrate, not more	2206	155	Isocyanate solution, poisonous, n.o.s.
		than 77% in solution	2206	155	Isocyanate solution, toxic, n.o.s.
2186	125	Hydrogen chloride, refrigerated liquid	2206	155	Isocyanate solutions, n.o.s.
2187	120	Carbon dioxide, refrigerated	2206	155	Isocyanates, n.o.s.
2107	120	liquid	2206	155	Isocyanates, poisonous, n.o.s.
2188	119	Arsine	2206	155	Isocyanates, toxic, n.o.s.
2189	_	Dichlorosilane	2207	155	Isocyanate solutions, n.o.s. (toxic)
2190	124	Oxygen difluoride	2207	155	Isocyanates, n.o.s. (toxic)
2190	124	Oxygen difluoride, compressed	2208	140	Bleaching powder
2191	123	Sulfuryl fluoride	2208	140	Calcium hypochlorite mixture,
2191	123	Sulphuryl fluoride			dry, with more than 10% but
2192	119	Germane			not more than 39% available Chlorine

Ì	ID No.	Guid	All the second of the second o	ID No.	Guid	e Name of Material
	_	_	Formaldehyde, solutions	2228	153	Butylphenols, liquid
	2200	102	(Formalin) (corrosive)	2229		Butylphenols, solid
	2210	135	Maneb	2232		Chloroacetaldehyde
	2210	135		2232	153	2-Chloroethanal
			than 60% Maneb	2233	152	Chloroanisidines
	2210		Pesticide, water-reactive	2234	130	Chlorobenzotrifluorides
		133	Polymeric beads, expandable	2235	153	Chlorobenzyl chlorides
	2211		Polystyrene beads, expandable	2236	156	3-Chloro-4-methylphenyl
	2212		Asbestos			isocyanate
	2212		Asbestos, blue	2237	153	Chloronitroanilines
	2212	171	Asbestos, brown	2238	130	Chlorotoluenes
	2212	171	Blue asbestos	2239	153	Chlorotoluidines
	2212			2239	153	Chlorotoluidines, liquid
	2213		Paraformaldehyde	2239	153	Chlorotoluidines, solid
	2214	156	Phthalic anhydride	2240	154	Chromosulfuric acid
	2215		Maleic acid	2240	154	Chromosulphuric acid
	2215	156	Maleic anhydride	2241	128	Cycloheptane
	2216	171	Fish meal, stabilized	2242	128	Cycloheptene
	2216	171	Fish meal containing 6% to 12% water	2243	130	Cyclohexyl acetate
	2216	171	Fish scrap, stabilized	2244	129	Cyclopentanol
	2216		Fish scrap containing 6% to 12%	2245	127	Cyclopentanone
	2210	171	water	2246	128	Cyclopentene
	2217	135	Seed cake, with not more than	2247	128	n-Decane
			1.5% oil and not more than	2248	132	Di-n-butylamine
			11% moisture	2249	153	Dichlorodimethyl ether,
			Acrylic acid, inhibited			symmetrical
			Allyl glycidyl ether	2250		Dichlorophenyl isocyanates
			Anisole	2251	127P	Bicyclo[2.2.1]hepta-2,5-diene
			Benzonitrile	2251	127P	Bicyclo[2.2.1]hepta-2,5-diene,
	2225		Benzenesulfonyl chloride	2254	4070	inhibited
	2225		Benzenesulphonyl chloride			Dicycloheptadiene
		156	Benzotrichloride	2251		2,5-Norbornadiene
	2227		n-Butyl methacrylate	2251		2,5-Norbornadiene, inhibited
,			'n-Butyl methacrylate, inhibited	2252	127	1,2-Dimethoxyethane
-	age 50	,				

ID No	Gui No		ID No.	Gui No	
225	3 <b>153</b>	N,N-Dimethylaniline	2278	128	n-Heptene
225	4 133	Matches, fusee	2279	151	Hexachlorobutadiene
225	5 146	Organic peroxides, samples,	2280	153	Hexamethylenediamine, solid
		n.o.s.	2281	156	Hexamethylene diisocyanate
225	5 146	Polyester resin kit	2282	129	Hexanols
225	6 130	Cyclohexene	2283	1301	P Isobutyl methacrylate
225	7 138	Potassium	2283	1301	P Isobutyl methacrylate, inhibited
225	7 138	Potassium, metal	2284	131	Isobutyronitrile
225	8 132	1,2-Propylenediamine	2285	156	Isocyanatobenzotrifluorides
225	8 132	1,3-Propylenediamine	2286	128	Pentamethylheptane
225	9 153	Triethylenetetramine	2287	128	Isoheptene
226	0 132	Tripropylamine	2288	128	Isohexene
226	1 153	Xylenols	2289	153	Isophoronediamine
226	2 156	Dimethylcarbamoyl chloride	2290	156	IPDI
226	3 <b>128</b>	Dimethylcyclohexanes	2290	156	Isophorone diisocyanate
226	4 132	Dimethylcyclohexylamine	2291	151	Lead chloride
226	5 129	N,N-Dimethylformamide	2291	151	Lead compound, soluble, n.o.s.
226	6 132	Dimethyl-N-propylamine	2291	151	Lead fluoborate
226	7 156	Dimethyl chlorothiophosphate	2293	127	4-Methoxy-4-methyl-
226	7 156	Dimethyl			pentan-2-one
		phosphorochloridothioate	2294	153	N-Methylaniline
226		Dimethylthiophosphoryl chloride	2295	155	Methyl chloroacetate
226		3,3'-Iminodipropylamine	2296	128	Methylcyclohexane
227	132	Ethylamine, aqueous solution, with not less than 50% but not	2297	127	Methylcyclohexanone
		more than 70% Ethylamine	2298	128	Methylcyclopentane
227	1 127	Ethyl amyl ketone	2299	155	Methyl dichloroacetate
227	2 153	N-Ethylaniline	2300	153	2-Methyl-5-ethylpyridine
227	3 <b>153</b>	2-Ethylaniline	2301	127	2-Methylfuran
	4 153		2302	127	5-Methylhexan-2-one
227		2-Ethylbutanol	2303	128	Isopropenylbenzene
	6 132		2304	133	Naphthalene, molten
227		P Ethyl methacrylate	2305	153	Nitrobenzenesulfonic acid
227		P Ethyl methacrylate, inhibited	2305	153	Nitrobenzenesulphonic acid
					Paga 51

ID Guide Name of Material No. No.	No. No.
2306 152 Nitrobenzotrifluorides	2324 128 Triisobutylene
2307 152 3-Nitro-4-chlorobenzotrifluorid	e 2325 <b>129</b> 1,3,5-Trimethylbenzene
2308 157 Nitrosylsulfuric acid	2326 153 Trimethylcyclohexylamine
2308 157 Nitrosylsulphuric acid	2327 <b>153</b> Trimethylhexamethylenediamines
2309 128P Octadiene	2328 <b>156</b> Trimethylhexamethylene diisocyanate
2310 127 Pentan-2,4-dione	2329 129 Trimethyl phosphite
2310 <b>127</b> 2,4-Pentanedione	2330 <b>128</b> Undecane
2310 127 Pentane-2,4-dione	2331 154 Zinc chloride, anhydrous
2311 153 Phenetidines	2332 129 Acetaldehyde oxime
2312 <b>153</b> Phenol, molten	2333 <b>131</b> Allyl acetate
2313 130 Picolines	2334 131 Allylamine
2315 171 Articles containing Polychlorinated biphenyls	2335 131 Allyl ethyl ether
(PCB)	2336 <b>131</b> Allyl formate
2315 171 PCB	2337 131 Phenyl mercaptan
2315 171 Polychlorinated biphenyls	2338 131 Benzotrifluoride
2316 157 Sodium cuprocyanide, solid	2339 <b>130</b> 2-Bromobutane
2317 157 Sodium cuprocyanide, solution	
2318 135 Sodium hydrosulfide, solid,	2341 130 1-Bromo-3-methylbutane
with less than 25% water of crystallization	2342 130 Bromomethylpropanes
2318 <b>135</b> Sodium hydrosulfide, with less	
than 25% water of	2344 <b>132</b> 2-Bromopropane
crystallization	2344 132 Bromopropanes
2318 135 Sodium hydrosulphide, solid, with less than 25% water of	2345 <b>132</b> 3-Bromopropyne
crystallization	2346 127 Butanedione
2318 135 Sodium hydrosulphide, with les	ss 2346 <b>127</b> Diacetyl
than 25% water of	2347 130 Butyl mercaptan
crystallization 2319 128 Terpene hydrocarbons, n.o.s.	2348 129P Butyl acrylate
2319 128 Terpene hydrocarbons, n.o.s. 2320 153 Tetraethylenepentamine	2348 129P Butyl acrylates, inhibited
	2350 127 Butyl methyl ether
2321 153 Trichlorobenzenes, liquid 2322 152 Trichlorobutene	2351 129 Butyl nitrites
2323 129 Triethyl phosphite	2352 127P Butyl vinyl ether, inhibited
2323 129 Themyr phosphite	2353 132 Butyryl chloride
Page 52	

ID Gu	nide Name of Material	ID Guide Name of Material No. No.
2354 13	1 Chloromethyl ethyl ether	2384 127 Di-n-propyl ether
2356 12	9 2-Chloropropane	2384 127 Dipropyl ether
2357 13:	2 Cyclohexylamine	2385 129 Ethyl isobutyrate
2358 12	8P Cyclooctatetraene	2386 132 1-Ethylpiperidine
2359 13	2 Diallylamine	2387 130 Fluorobenzene
2360 13	1P Diallyl ether	2388 130 Fluorotoluenes
2361 13	2 Diisobutylamine	2389 <b>127</b> Furan
2362 13	0 1,1-Dichloroethane	2390 <b>129</b> 2-lodobutane
2363 13	0 Ethyl mercaptan	2391 129 lodomethylpropanes
2364 12	7 n-Propyl benzene	2392 129 lodopropanes
2366 12	7 Diethyl carbonate	2393 132 Isobutyl formate
2367 13	0 alpha-Methylvaleraldehyde	2394 129 Isobutyl propionate
2367 13	Methyl valeraldehyde (alpha)	2395 132 Isobutyryl chloride
2368 <b>12</b>	7 alpha-Pinene	2396 131P Methacrylaldehyde
2368 <b>12</b>	7 Pinene (alpha)	2396 131P Methacrylaldehyde, inhibited
2369 15	2 Ethylene glycol monobutyl ether	2397 <b>127</b> 3-Methylbutan-2-one
2370 12	8 1-Hexene	2398 127 Methyl tert-butyl ether
2371 12	8 Isopentenes	2399 132 1-Methylpiperidine
2372 12	9 1,2-Di-(dimethylamino)ethane	2400 130 Methyl isovalerate
2373 12	7 Diethoxymethane	2401 132 Piperidine
2374 12	7 3,3-Diethoxypropene	2402 130 Isopropyl mercaptan
2375 12	9 Diethyl sulfide	2402 130 Propanethiols
2375 129	9 Diethyl sulphide	2402 130 Propyl mercaptan
2376 12	7 2,3-Dihydropyran	2403 129P Isopropenyl acetate
2377 12	7 1,1-Dimethoxyethane	2404 131 Propionitrile
2378 13	1 2-Dimethylaminoacetonitrile	2405 129 Isopropyl butyrate
2379 13:	2 1,3-Dimethylbutylamine	2406 131 Isopropyl isobutyrate
2380 12	7 Dimethyldiethoxysilane	2407 155 Isopropyl chloroformate
2381 13	O Dimethyl disulfide	2409 129 Isopropyl propionate
2381 <b>13</b>	O Dimethyl disulphide	2410 <b>129</b> 1,2,3,6-Tetrahydropyridine
2382 13	1 1,2-Dimethylhydrazine	2410 <b>129</b> 1,2,5,6-Tetrahydropyridine
2382 13	1 Dimethylhydrazine, symmetrical	2411 131 Butyronitrile
2383 13	2 Dipropylamine	2412 <b>129</b> Tetrahydrothiophene
		Page 5.

ID Gu No. No	ide Name of Material	ID No.	Gui No	
2413 128	Tetrapropyl orthotitanate	2434	156	Dibenzyldichlorosilane
2414 130	Thiophene	2435	156	Ethylphenyldichlorosilane
2416 129	Trimethyl borate	2436	129	Thioacetic acid
2417 125	Carbonyl fluoride	2437	156	Methylphenyldichlorosilane
2417 125	Carbonyl fluoride, compressed	2438	132	Trimethylacetyl chloride
2418 125	Sulfur tetrafluoride	2439	154	Sodium bifluoride, solid
2418 <b>125</b>	Sulphur tetrafluoride	2439	154	Sodium bifluoride, solution
2419 116	Bromotrifluoroethylene	2439	154	Sodium hydrogendifluoride
2420 125	Hexafluoroacetone	2439	154	Sodium hydrogen fluoride
2421 124	Nitrogen trioxide	2440	154	Stannic chloride, pentahydrate
2422 126	Octafluorobut-2-ene	2440	154	Tin tetrachloride, pentahydrate
2422 126	Refrigerant gas R-1318	2441	135	Titanium trichloride, pyrophoric
2424 <b>126</b>	Octafluoropropane	2441	135	Titanium trichloride mixture,
2424 126	Refrigerant gas R-218			pyrophoric
2426 140	Ammonium nitrate, liquid (hot	2442		Trichloroacetyl chloride
2427 140	concentrated solution)  Potassium chlorate, aqueous solution	2443	137	Titanium tetrachloride and Vanadium oxytrichloride, mixture
2427 140	Potassium chlorate, solution	2443	137	Vanadium oxytrichloride
2428 <b>140</b>	Sodium chlorate, aqueous solution	2443	137	Vanadium oxytrichloride and Titanium tetrachloride, mixture
2429 140	Calcium chlorate, aqueous solution	2444	137	Vanadium tetrachloride
2429 140		2445		Lithium alkyls
2430 153		2446		Nitrocresols
2430 133	Alkyl phenols, solid, n.o.s. (including C2-C12	2447	136	Phosphorus, white, molten
	homologues)		136	White phosphorus, molten
2431 153	Anisidines	2447		Yellow phosphorus, molten
2431 153	Anisidines, liquid	2448	133	Sulfur, molten
2431 153	Anisidines, solid	2448		Sulphur, molten
2432 153	N,N-Diethylaniline	2449		Ammonium oxalate
2433 152	Chloronitrotoluenes	2449		Oxalates, water soluble
2433 152	Chloronitrotoluenes, liquid	2451	122	Nitrogen trifluoride
2433 152	Chloronitrotoluenes, solid	2451		Nitrogen trifluoride, compressed
Paga 54				og om armuoride, compressed

No.	No	767 - Lin	No.	No	200 83
2452	116	Ethyl acetylene, inhibited	2477	131	Methyl isothiocyanate
2453	115	Ethyl fluoride	2478	155	Isocyanate solution, flammable,
2453	115	Refrigerant gas R-161			poisonous, n.o.s.
2454	115	Methyl fluoride	2478	155	Isocyanate solution, flammable, toxic, n.o.s.
2454	115	Refrigerant gas R-41	2478	155	Isocyanate solutions, n.o.s.
2455	116	Methyl nitrite	2478		Isocyanates, flammable,
2456	130F	2-Chloropropene	2470	100	poisonous, n.o.s.
2457	128	2,3-Dimethylbutane	2478	155	Isocyanates, flammable, toxic,
2458	130	Hexadiene	. 10		n.o.s.
2459	127	2-Methyl-1-butene	2478	155	Isocyanates, n.o.s.
2460	127	2-Methyl-2-butene	2480	155	Methyl isocyanate
2461	127	Methylpentadiene	2481	155	Ethyl isocyanate
2462	128	Methyl pentane	2482	155	n-Propyl isocyanate
2463	138	Aluminum hydride	2483	155	Isopropyl isocyanate
2464	141	Beryllium nitrate	2484	155	tert-Butyl isocyanate
2465	141	Dichloroisocyanuric acid, dry	2485	155	n-Butyl isocyanate
2465	141	Dichloroisocyanuric acid salts	2486	155	Isobutyl isocyanate
2465	141	Potassium dichloro-s-	2487	155	Phenyl isocyanate
0.405		triazinetrione, dry	2488	155	Cyclohexyl isocyanate
2465		Sodium dichloroisocyanurate	2489	156	Diphenylmethane-4,4'-
	141	Sodium dichloro-s-triazinetrione	0.400		diisocyanate
2466		Potassium superoxide	2490		Dichloroisopropyl ether
2467	140	Sodium percarbonates	2491	153	Ethanolamine
2468	141	Trichloroisocyanuric acid, dry	2491		Ethanolamine, solution
1	141	Trichloro-s-triazinetrione, dry	2491		Monoethanolamine
2468	141	(mono)-(Trichloro)-tetra- (monopotassium dichloro)-	2493	V_E	Hexamethyleneimine
		penta-s-triazinetrione, dry	2495		lodine pentafluoride
2469	140	Zinc bromate	2496		Propionic anhydride
2470	152	Phenylacetonitrile, liquid	2497		Sodium phenolate, solid
2471	154	Osmium tetroxide	2498	132	1,2,3,6-Tetrahydro- benzaldehyde
2473	154	Sodium arsanilate	2501	152	1-Aziridinyl phosphine oxide
2474	157	Thiophosgene			(Tris)
2475	157	Vanadium trichloride			
					Page 55

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
2501 152 Tri-(1-aziridinyl)phosphine	2527 130P Isobutyl acrylate
oxide, solution	2527 130P Isobutyl acrylate, inhibited
2501 152 Tris-(1-aziridinyl)phosphine	2528 129 Isobutyl isobutyrate
oxide, solution	2529 <b>132</b> Isobutyric acid
2502 132 Valeryl chloride	2530 132 Isobutyric anhydride
2503 137 Zirconium tetrachloride	2531 153P Methacrylic acid, inhibited
2504 <b>159</b> Acetylene tetrabromide 2504 <b>159</b> Tetrabromoethane	2533 156 Methyl trichloroacetate
2504 <b>159</b> Tetrabromoethane 2505 <b>154</b> Ammonium fluoride	2534 119 Methylchlorosilane
2506 154 Ammonium hydrogen sulfate	2535 132 4-Methylmorpholine
2506 154 Ammonium hydrogen sulphate	2535 132 N-Methylmorpholine
2507 <b>154</b> Chloroplatinic acid, solid	2535 132 Methylmorpholine
2508 <b>156</b> Molybdenum pentachloride	2536 127 Methyltetrahydrofuran
2509 <b>154</b> Potassium hydrogen sulfate	2538 133 Nitronaphthalene
2509 <b>154</b> Potassium hydrogen sulphate	2541 128 Terpinolene
2511 <b>153</b> 2-Chloropropionic acid	2542 153 Tributylamine
2511 153 alpha-Chloropropionic acid	2545 135 Hafnium powder, dry
2512 <b>152</b> Aminophenols	2546 135 Titanium powder, dry
2513 156 Bromoacetyl bromide	2547 143 Sodium superoxide
2514 129 Bromobenzene	2548 124 Chlorine pentafluoride
2515 <b>159</b> Bromoform	2550 147 Methyl ethyl ketone peroxide
2516 151 Carbon tetrabromide	2551 145 tert-Butyl peroxydiethylacetate,
2517 115 1-Chloro-1,1-difluoroethane	with tert-Butyl peroxybenzoate
2517 115 Chlorodifluoroethanes	2552 <b>151</b> Hexafluoroacetone hydrate
2517 115 Difluorochloroethanes	2553 <b>128</b> Naphtha
2517 115 Refrigerant gas R-142b	2554 129P Methylallyl chloride
2518 153 1,5,9-Cyclododecatriene	2555 113 Nitrocellulose, colloided,
2520 130P Cyclooctadienes	granular or flake, wet, with not
2521 131P Diketene, inhibited	less than 20% water
2522 153P Dimethylaminoethyl methacrylate	2555 113 Nitrocellulose with water, not less than 25% water
2524 129 Ethyl orthoformate	2556 113 Nitrocellulose, wet, with not less than 30% alcohol or solvent
2525 156 Ethyl oxalate	2556 113 Nitrocellulose with alcohol
2526 132 Furfurylamine	2000 110 Millocendiose with alcohol
Page 56	

	No.	No.		No.	No.	
	2556	113		2582	154	Ferric chloride, solution
			25% alcohol	2583	153	Alkyl sulfonic acids, solid, with
	2557		Lacquer chips, dry			more than 5% free Sulfuric
	2557	133	Nitrocellulose mixture, without plasticizer, without pigment	2583	153	Alkyl sulphonic acids, solid, with
	2557	133	Nitrocellulose mixture, without			more than 5% free Sulphuric
			plasticizer, with pigment	0500	1	acid
	2557	133	Nitrocellulose mixture, with	2583	153	Aryl sulfonic acids, solid, with more than 5% free Sulfuric
	2557	122	plasticizer, without pigment  Nitrocellulose mixture, with			acid
	2331	133	plasticizer, with pigment	2583	153	Aryl sulphonic acids, solid, with
	2557	133	Nitrocellulose with plasticizing			more than 5% free Sulphuric acid
			substance	2583	153	Toluene sulfonic acid, solid, with
	2558	131	Epibromohydrin			more than 5% free Sulfuric
	2560	129	2-Methylpentan-2-ol			acid
	2561		3-Methyl-1-butene	2583	153	Toluene sulphonic acid, solid, with more than 5% free
	2562		tert-Butyl peroxyisobutyrate	1 100		Sulphuric acid
ı	2564		Trichloroacetic acid, solution	2584	153	Alkyl sulfonic acids, liquid, with more than 5% free Sulfuric acid
ľ	2565		Dicyclohexylamine			
1	2567		Sodium pentachlorophenate	2584	452	
	2570		Cadmium compound	2304	155	with more than 5% free
ı	2571		Alkylsulfuric acids			Sulphuric acid
	2571		Alkylsulphuric acids	2584	153	, , , , , , , , , , , , , , , , , , , ,
	2571		Ethylsulfuric acid			more than 5% free Sulfuric
	2571	14	Ethylsulphuric acid	2584	153	
	<ul><li>2572</li><li>2573</li></ul>		Phenylhydrazine Thallium chlorate			more than 5% free Sulphuric
	2574	-10	Tricresyl phosphate			acid
		137	Phosphorus oxybromide, molten	2584		Dodecylbenzenesulfonic acid
-	2577		Phenylacetyl chloride	2584		Dodecylbenzenesulphonic acid
	2578		Phosphorus trioxide	2584	153	Toluene sulfonic acid, liquid, with more than 5% free
	2579		Piperazine			Sulfuric acid
	2580		Aluminum bromide, solution	2584	153	Toluene sulphonic acid, liquid,
	2581		Aluminum chloride, solution			with more than 5% free Sulphuric acid
			The state of the s			Sulphune acid
1						

Guide Name of Material | ID Guide Name of Material

ID

ID No.	Guid No.		ID No.	Gui No.	
2585	153	Alkyl sulfonic acids, solid, with not more than 5% free Sulfuric	2588	151	Pesticide, solid, poisonous, n.o.s.
		acid	2588	151	Pesticide, solid, toxic, n.o.s.
2585	585 153 Alkyl sulphonic acids, solid, with not more than 5% free	2589	155	Vinyl chloroacetate	
		Sulphuric acid	2590	171	Asbestos, white
2585	153	Aryl sulfonic acids, solid, with	2590	171	White asbestos
		not more than 5% free Sulfuric acid	2591	120	Xenon, refrigerated liquid (cryogenic liquid)
2585	153	Aryl sulphonic acids, solid, with	2592	145	Distearyl peroxydicarbonate
		not more than 5% free Sulphuric acid	2593	148	Di-(2-methylbenzoyl)peroxide
2585	153	Toluene sulfonic acid, solid, with	2594	148	tert-Butyl peroxyneodecanoate
2303	133	not more than 5% free Sulfuric	2595	148	Dimyristyl peroxydicarbonate
2585	153	acid Toluene sulphonic acid, solid,	2596	145	tert-Butyl peroxy-3- phenylphthalide
		with not more than 5% free Sulphuric acid	2597	148	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide
2586	153	Alkyl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	2598	145	Ethyl-3,3-di-(tert- butylperoxy)butyrate
2586	153	Alkyl sulphonic acids, liquid, with not more than 5% free Sulphuric acid	2599	126	Chlorotrifluoromethane and Trifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane
2586	153	Aryl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	2599	126	Refrigerant gas R-13 and Refrigerant gas R-23 azeotropic mixture with 60%
2586	153	Aryl sulphonic acids, liquid, with			Refrigerant gas R-13
		not more than 5% free Sulphuric acid	2599	126	Refrigerant gas R-23 and Refrigerant gas R-13
2586	153	Toluene sulfonic acid, liquid, with not more than 5% free			azeotropic mixture with 60% Refrigerant gas R-13
0500	450	Sulfuric acid	2599	126	Refrigerant gas R-503
2586	153	Toluene sulphonic acid, liquid, with not more than 5% free Sulphuric acid			(azeotropic mixture of Refrigerant gas R-13 and Refrigerant gas R-23 with
2587	153	Benzoquinone			approximately 60%
2588	151	Insecticide, dry, n.o.s.			Refrigerant gas R-13)
2588	151	Pesticide, solid, poisonous			

No.	No		No.	No.	AL 17
2599	126	Trifluoromethane and	2606	155	Methyl orthosilicate
		Chlorotrifluoromethane azeotropic mixture with	2607	129F	Acrolein dimer, stabilized
N		approximately 60%	2608	129	Nitropropanes
		Chlorotrifluoromethane	2609	156	Triallyl borate
2600	119	Carbon monoxide and Hydrogen	2610	132	Triallylamine
		mixture	2611	131	Propylene chlorohydrin
2600	119	Carbon monoxide and Hydrogen mixture, compressed	2612	127	Methyl propyl ether
2600	119	Hydrogen and Carbon monoxide	2614	129	Methallyl alcohol
		mixture	2615	127	Ethyl propyl ether
2600	119	Hydrogen and Carbon monoxide	2616	129	Triisopropyl borate
		mixture, compressed	2617	129	Methylcyclohexanols
2601		Cyclobutane	2618	130F	Vinyltoluene, inhibited
2602	126	Dichlorodifluoromethane and Difluoroethane azeotropic	2619	132	Benzyldimethylamine
		mixture with approximately			Amyl butyrates
		74% Dichlorodifluoromethane			Acetyl methyl carbinol
2602	126	Difluoroethane and			Glycidaldehyde
		Dichlorodifluoromethane azeotropic mixture with	2623	133	Firelighters, solid, with flammable liquid
		approximately 74%	2624	138	Magnesium silicide
		dichlorodifluoromethane	2626		Chloric acid
2602	126	Refrigerant gas R-12 and Refrigerant gas R-152a	2626		Chloric acid, aqueous solution,
		azeotropic mixture with 74%	2020	140	with not more than 10%
		Refrigerant gas R-12			Chloric acid
2602	126	Refrigerant gas R-152a and	2627	140	Nitrites, inorganic, n.o.s.
		Refrigerant gas R-12 azeotropic mixture with 74%	2628	151	Potassium fluoroacetate
		Refrigerant gas R-12	2629		Sodium fluoroacetate
2602	126	Refrigerant gas R-500	2630		Barium selenate
100		(azeotropic mixture of Refrigerant gas R-12 and	2630	151	Barium selenite
		Refrigerant gas R-152a with	2630		Calcium selenate
100		approximately 74% Refrigerant gas R-12)	2630		Potassium selenate
2603	121	Cycloheptatriene	2630		Potassium selenite
2603		Boron trifluoride diethyl etherate	2630		Selenates
2605		Methoxymethyl isocyanate	2630		Selenites
2003	133	methoxymethyr isocyanate	2630	151	Sodium selenite  Page 59

Guide Name of Material ID Guide Name of Material

ID

ID No.		de Name of Material	ID No.			Name of Material
2630	151	Zinc selenate	2672	154		onia, solution, with more
2630	151	Zinc selenite	1			an 10% but not more than % Ammonia
2642	156	Fluoroacetic acid	2672	154		onium hydroxide
2643	155	Methyl bromoacetate	2672			onium hydroxide, with more
2644	151	Methyl iodide	2012	104		an 10% but not more than
2645	153	Phenacyl bromide	١.,			% Ammonia
2646	151	Hexachlorocyclopentadiene	2673	151	2-Am	ino-4-chlorophenol
2647	153	Malononitrile	2674	154	Sodi	um fluorosilicate
2648	154	1,2-Dibromobutan-3-one	2674	154	Sodi	um silicofluoride
2649	153	1,3-Dichloroacetone	2676	119	Stibii	nei
2650	153	1,1-Dichloro-1-nitroethane	2677	154	Rubio	dium hydroxide, solution
2651	153	4,4'-Diaminodiphenylmethane	2678	154	Rubio	dium hydroxide
2653	156	Benzyl iodide	2678	154	Rubio	dium hydroxide, solid
2655	151	Potassium fluorosilicate	2679	154	Lithiu	ım hydroxide, solution
2655	151	Potassium silicofluoride	2680	154	Lithiu	ım hydroxide, monohydrate
2656	154	Quinoline	2680	154	Lithiu	ım hydroxide, solid
2657	153	Selenium disulfide	2681	154	Caes	ium hydroxide, solution
2657	153	Selenium disulphide	2681	154	Cesiu	um hydroxide, solution
2658	152	Selenium powder	2682	157	Caes	ium hydroxide
2659	151	Sodium chloroacetate	2682	157	Cesiu	ım hydroxide
2660	153	Mononitrotoluidines	2683	132		onium hydrosulfide,
2660	153	Nitrotoluidines (mono)				ution
2661	153	Hexachloroacetone	2683	132		onium hydrosulphide, ution
	153	Hydroquinone	2683	132	Amm	onium sulfide, solution
2664	160	Dibromomethane	2683			onium sulphide, solution
2666	156	Ethyl cyanoacetate	2684			thylaminopropylamine
2667	131	Butyltoluenes	2684			ylaminopropylamine
2668	131	Chloroacetonitrile	2685			Diethylethylenediamine
2669	152	Chlorocresols	2686			thylaminoethanol
2669	152	Chlorocresols, liquid	2686			ylaminoethanol
2669	152	Chlorocresols, solid	2687			
2670	157	Cyanuric chloride	2688			lohexylammonium nitrite
2671	153	Aminopyridines	2000	133	1-010	mo-3-chloropropane

The second second	Suide Name of Material No.	ID Guide Name of Material No. No.
2688	159 1-Chloro-3-bromopropane	2711 129 Dibromobenzene
2689		2713 <b>153</b> Acridine
8	monochlorohydrin	2714 133 Zinc resinate
2690		2715 133 Aluminum resinate
	137 Phosphorus pentabromide	2716 <b>153</b> 1,4-Butynediol
	157 Boron tribromide	2717 133 Camphor
2693		2717 133 Camphor, synthetic
2693		2719 141 Barium bromate
2693	154 Ammonium bisulphite, solid	2720 141 Chromium nitrate
2693		2721 141 Copper chlorate
2693		2722 140 Lithium nitrate
2002	n.o.s.	2723 140 Magnesium chlorate
2693	154 Bisulfites, inorganic, aqueous solutions, n.o.s.	2724 140 Manganese nitrate
2693		2725 140 Nickel nitrate
	n.o.s.	2726 140 Nickel nitrite
2693	154 Bisulphites, inorganic, aqueous	2727 141 Thallium nitrate
	solutions, n.o.s.	2728 140 Zirconium nitrate
2693	154 Calcium hydrogen sulfite, solution	2729 <b>152</b> Hexachlorobenzene
2693	154 Calcium hydrogen sulphite,	2730 152 Nitroanisole
1657716	solution	2730 152 Nitroanisole, liquid
2693	154 Magnesium bisulfite solution	2730 <b>152</b> Nitroanisole, solid
2693	154 Magnesium bisulphite solution	2732 152 Nitrobromobenzene
2693	154 Potassium bisulfite solution	2732 152 Nitrobromobenzene, liquid
2693	154 Potassium bisulphite solution	2732 <b>152</b> Nitrobromobenzene, solid
2693	154 Zinc bisulfite solution	2733 <b>132</b> Alkylamines, n.o.s.
2693	154 Zinc bisulphite solution	2733 132 Amines, flammable, corrosive,
2698	156 Tetrahydrophthalic anhydrides	n.o.s.
2699	154 Trifluoroacetic acid	2733 132 Polyalkylamines, n.o.s.
2705	153P 1-Pentol	2733 132 Polyamines, flammable, corrosive, n.o.s.
2707	128 Dimethyldioxanes	2734 <b>132</b> Alkylamines, n.o.s.
2708	127 Butoxyl	2734 132 Amines, liquid, corrosive,
2709	128 Butylbenzenes	flammable, n.o.s.
2710	127 Dipropyl ketone	2734 132 Polyalkylamines, n.o.s.
		Page 61

ID No.	Gui No.	THE RESIDENCE OF THE PERSON NAMED IN COLUMN 1	No.	Guid No.	
2734	132	Polyamines, liquid, corrosive, flammable, n.o.s.	2757	151	Carbamate pesticide, solid, poisonous
2735	153	Alkylamines, n.o.s.	2757	151	Carbamate pesticide, solid,
2735	153	Amines, liquid, corrosive, n.o.s.			toxic
2735	153	Polyalkylamines, n.o.s.	2757	151	Carbaryl
2735	153	Polyamines, liquid, corrosive,	2757	151	Carbofuran
		n.o.s.	2757	151	Mexacarbate
2738	153	N-Butylaniline	2758	131	Carbamate pesticide, liquid, flammable, poisonous
2739	156	Butyric anhydride	0750	424	
2740	155	n-Propyl chloroformate	2758	131	Carbamate pesticide, liquid, flammable, toxic
2741	141	Barium hypochlorite, with more than 22% available Chlorine	2759	151	Arsenical pesticide, solid, poisonous
2742	155	sec-Butyl chloroformate	2759	151	Arsenical pesticide, solid, toxic
2742	155	Chloroformates, n.o.s.	2760	131	Arsenical pesticide, liquid,
2742	155	Chloroformates, poisonous,			flammable, poisonous
2742	155	corrosive, flammable, n.o.s. Chloroformates, toxic,	2760	131	Arsenical pesticide, liquid, flammable, toxic
		corrosive, flammable, n.o.s.	2761	151	Aldrin, solid
2742		Isobutyl chloroformate	2761	151	Aldrin mixture, dry
2743	155	n-Butyl chloroformate	2761	151	DDT
2744 2745		Cyclobutyl chloroformate Chloromethyl chloroformate	2761	151	Dichlorodiphenyltrichloroethane (DDT)
2746	156	Phenyl chloroformate	2761	151	Dieldrin
2747	156	tert-Butylcyclohexyl	2761	151	Endosulfan
0740		chloroformate	2761	151	Lindane
2748		2-Ethylhexyl chloroformate	2761	151	Organochlorine pesticide, solid,
2749		Tetramethylsilane			poisonous
2750		1,3-Dichloropropanol-2	2761	151	Organochlorine pesticide, solid,
2751	155	Diethylthiophosphoryl chloride	0764	454	toxic
2752		1,2-Epoxy-3-ethoxypropane	2761	151	TDE (1,1-Dichloro-2,2-bis- (p-chlorophenyl)ethane)
2753		N-Ethylbenzyltoluidines	2761	151	Toxaphene
2754		N-Ethyltoluidines	2762	131	Aldrin, liquid
2755		3-Chloroperoxybenzoic acid	2762		Aldrin mixture, liquid
2756	146	Organic peroxides, mixtures			

ID No.	Gui No.		ID No.	Guid No.	
2762	131	Organochlorine pesticide, liquid, flammable, poisonous	2770	131	Benzoic derivative pesticide, liquid, flammable, toxic
2762	131	Organochlorine pesticide, liquid, flammable, toxic	2771	151	Dithiocarbamate pesticide, solid, poisonous
2763	151	Triazine pesticide, solid, poisonous	2771	151	Dithiocarbamate pesticide, solid, toxic
2763	151	Triazine pesticide, solid, toxic	2771	151	Thiram
2764	131	Triazine pesticide, liquid, flammable, poisonous	2772	131	Dithiocarbamate pesticide, liquid, flammable, poisonous
2764	131	Triazine pesticide, liquid, flammable, toxic	2772	131	Dithiocarbamate pesticide, liquid, flammable, toxic
2765 2765		2,4-Dichlorophenoxyacetic acid Phenoxy pesticide, solid,	2773	151	Phthalimide derivative pesticide, solid, poisonous
2765		poisonous  Phenoxy pesticide, solid, toxic	2773	151	Phthalimide derivative pesticide, solid, toxic
2765		2,4,5-Trichlorophenoxyacetic acid	2774	131	Phthalimide derivative pesticide, liquid, flammable, poisonous
2765		propionic acid	2774	131	Phthalimide derivative pesticide, liquid, flammable,
2/00	131	Phenoxy pesticide, liquid, flammable, poisonous	0775	454	toxic
2766	131	Phenoxy pesticide, liquid, flammable, toxic	2775		Copper based pesticide, solid, poisonous
2767	151	Phenyl urea pesticide, solid, poisonous	2775	151	Copper based pesticide, solid, toxic
2767	151	Phenyl urea pesticide, solid, toxic	2776	131	Copper based pesticide, liquid, flammable, poisonous
2768	131	Phenyl urea pesticide, liquid, flammable, poisonous	2776	131	Copper based pesticide, liquid, flammable, toxic
2768	131	Phenyl urea pesticide, liquid, flammable, toxic	2777	151	Mercury based pesticide, solid, poisonous
2769	151	Benzoic derivative pesticide, solid, poisonous	2777	151	Mercury based pesticide, solid, toxic
2769	151	Benzoic derivative pesticide, solid, toxic	2778	131	Mercury based pesticide, liquid, flammable, poisonous
2770	131	Benzoic derivative pesticide, liquid, flammable, poisonous	2778	131	Mercury based pesticide, liquid, flammable, toxic

	uide Name of Material No.	No.	Gui No.	
2779 1	53 Substituted nitrophenol pesticide, solid, poisonous	2783	152	Organic phosphorus compound, dry
2779 1	53 Substituted nitrophenol pesticide, solid, toxic	2783	152	Organic phosphorus compound, solid
2780 1	pesticide, liquid, flammable,	2783	152	Organophosphorus pesticide, solid, poisonous
0700 4	poisonous	2783	152	Organophosphorus pesticide,
2780 1	31 Substituted nitrophenol pesticide, liquid, flammable,	0702	450	solid, toxic Parathion
	toxic	2783		Parathion mixture, dry
2781 <b>1</b>		2783		Parathion mixture, liquid
0704 4	poisonous	2783		Tetraethyl pyrophosphate, liquid
2781 1	51 Bipyridilium pesticide, solid, toxic	2783	152	Tetraethyl pyrophosphate, solid
2782 1	31 Bipyridilium pesticide, liquid,	2783		Tetraethyl pyrophosphate
	flammable, poisonous	2.00		mixture, dry
2782 1		2783	152	Trichlorfon
2783 1	flammable, toxic  52 Azinphos methyl	2784	131	Organophosphorus pesticide, liquid, flammable, poisonous
2783 1	52 Chlorpyrifos	2784	131	Organophosphorus pesticide,
2783 1	52 Coumaphos	_		liquid, flammable, toxic
2783 1	52 Diazinon	2785		4-Thiapentanal
2783 1	52 Dichlorvos	2785		Thia-4-pentanal
2783 1		2786	153	Organotin pesticide, solid, poisonous
2783 1		2786	153	Organotin pesticide, solid, toxic
2783 1	52 Hexaethyl tetraphosphate mixture, liquid	2787		Organotin pesticide, liquid,
2783 1	Methyl parathion, liquid	2787	121	flammable, poisonous Organotin pesticide, liquid,
2783 1	, , , , , , , , , , , , , , , , , , , ,	2101	131	flammable, toxic
2783 1	, , , , , , , , , , , , , , , , , , , ,	2788	153	Organotin compound, liquid,
2783 1				n.o.s.
	52 Organic phosphate, dry	2789	132	Acetic acid, glacial
	52 Organic phosphate, solid	2789	132	Acetic acid, solution, more than
2783 1	52 Organic phosphate compound, dry	2790	153	80% acid Acetic acid, solution, more than
2783 1	52 Organic phosphate compound, solid			10% but not more than 80% acid
Page 64				

No. No		No.	Guid No.	
2793 170	,	2806	138	Lithium nitride
P 119	shavings, turnings or cuttings	2807	171	Magnetized material
2793 170		2809	172	Mercury
2794 <b>154</b>	Batteries, wet, filled with acid	2809	172	Mercury, metallic
2794 <b>154</b>		2809	172	Mercury metal
2795 <b>154</b>		2810	153	Compound, tree or weed killing,
2795 154		0040		liquid (toxic)
2796 157		2810		Drugs, liquid, n.o.s.
2796 <b>157</b> 2796 <b>157</b>		2810	153	Medicines, poisonous, liquid, n.o.s.
	electronic equipment or	2810	153	Medicines, toxic, liquid, n.o.s.
0700 455	actuating device	2810	153	Poison B, liquid, n.o.s.
2796 <b>157</b>	Sulfuric acid, with not more than 51% acid	2810	153	Poisonous liquid, n.o.s.
2796 <b>157</b>		2810	153	Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)
2797 <b>154</b>		2810	153	Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)
2797 154		2810	153	Poisonous liquid, organic, n.o.s.
2797 <b>154</b>	Battery fluid, alkali, with electronic equipment or actuating device	2810	153	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)
2798 <b>137</b>		2810	153	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)
2798 <b>137</b>	Phenylphosphorus dichloride	2810	153	Toxic liquid, n.o.s.
2799 <b>137</b>	Benzene phosphorus thiodichloride	2810	153	Toxic liquid, n.o.s. (Inhalation Hazard Zone A)
2799 137	Phenylphosphorus thiodichloride	2810	153	Toxic liquid, n.o.s. (Inhalation Hazard Zone B)
2800 154	Batteries, wet, non-spillable	2810	153	Toxic liquid, organic, n.o.s.
2801 154	Coal tar dye, liquid	2810	153	Toxic liquid, organic, n.o.s.
2801 154	Dye, liquid, corrosive, n.o.s.	┖		(Inhalation Hazard Zone A)
2801 154	Dye intermediate, liquid, corrosive, n.o.s.	2810	153	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)
2802 154	Copper chloride	2811	154	Drugs, solid, n.o.s.
2803 172	! Gallium	2811	154	Flue dust, poisonous
2805 138	Lithium hydride, fused solid	2811	154	Lead fluoride
		3		

	ID No.	Gui		ID No.	Gui No	
	2811	154	Medicines, poisonous, solid,	2823	153	Crotonic acid
			n.o.s.	2823	153	Crotonic acid, liquid
	2811			2823	153	Crotonic acid, solid
	2811			2826	155	Ethyl chlorothioformate
	2811	154		2829	153	Caproic acid
	2811	154		2829	153	Hexanoic acid
	2811	154	Selenium oxide	2830	139	Lithium ferrosilicon
	2811	154	Toxic solid, n.o.s.	2831	160	1,1,1-Trichloroethane
	2811	154	Toxic solid, organic, n.o.s.	2834	154	Phosphorous acid
	2812	154	Sodium aluminate, solid	2834	154	Phosphorous acid, ortho
	2813	138		2835	138	Sodium aluminum hydride
	2042	420	Ethylenediamine complex	2837	154	Bisulfates, aqueous solution
	2813	130	Substances, which in contact with water emit flammable	2837	154	Bisulphates, aqueous solution
			gases, solid, n.o.s.	2837	154	Sodium bisulfate, solution
	2813	138	Water-reactive solid, n.o.s.	2837	154	Sodium bisulphate, solution
	2813	138	Water-reactive substances, solid, n.o.s.	2837	154	Sodium hydrogen sulfate, solution
	2814	158	Etiologic agent, n.o.s.	2837	154	Sodium hydrogen sulphate,
	2814	158		,		solution
			humans	2838	1291	P Vinyl butyrate, inhibited
	2815		, , , , , , , , , , , , , , , , , , , ,	2839	153	Aldol
	2817	154	Ammonium bifluoride, solution	2840	129	Butyraldoxime
	2817	154	Ammonium hydrogendifluoride, solution	2841	132	Di-n-amylamine
	2917	154		2842	129	Nitroethane
	2017	134	Ammonium hydrogen fluoride, solution	2844	138	Calcium manganese silicon
			Ammonium polysulfide, solution	2845	135	Ethyl phosphonous dichloride, anhydrous
	2818	154	Ammonium polysulphide, solution	2845	135	Methyl phosphonous dichloride
	2819	153	Amyl acid phosphate	2845	135	Pyrophoric liquid, n.o.s.
	2820		Butyric acid	2845	135	Pyrophoric liquid, organic, n.o.s.
	2821		Phenol, liquid	2846	135	Pyrophoric solid, n.o.s.
	2821		Phenol solution	2846	135	Pyrophoric solid, organic, n.o.s.
	2822		2-Chloropyridine	2849	153	3-Chloropropanol-1
				2850	128	Propylene tetramer
F	Page 66					

ID No.	Guid No.	de Name of Material	ID No.		de Name of Material
2851	157	Boron trifluoride, dihydrate	2859	154	Ammonium metavanadate
2852	113	Dipicryl sulfide, wetted with not	2860	154	Vanadium trioxide
N.		less than 10% water	2861	151	Ammonium polyvanadate
2852	113	Dipicryl sulphide, wetted with not less than 10% water	2862	151	Vanadium pentoxide
2853	151	Magnesium fluorosilicate	2863	154	Sodium ammonium vanadate
2853		Magnesium silicofluoride	2864	151	Potassium metavanadate
2854		Ammonium fluorosilicate	2865	154	Hydroxylamine sulfate
2854		Ammonium silicofluoride	2865	154	Hydroxylamine sulphate
2855		Zinc fluorosilicate	2869	157	Titanium trichloride mixture
2855		Zinc silicofluoride	2870	135	Aluminum borohydride
2856		Fluorosilicates, n.o.s.	2870	135	Aluminum borohydride in devices
2856	151	Silicofluorides, n.o.s.	2871	170	Antimony powder
2857	126		2872	159	Dibromochloropropanes
1		containing Ammonia solutions (UN2073)	2873	153	Dibutylaminoethanol
2857	126	Refrigerating machines,	2874	153	Furfuryl alcohol
		containing Ammonia solutions	2875	151	Hexachlorophene
The same	110	(UN2672)	2876	153	Resorcinol
2857	126	Refrigerating machines, containing non-flammable,	2878	170	Titanium sponge graņules
1.0		liquefied gas	2878	170	Titanium sponge powders
2857	126	Refrigerating machines,	2879	157	Selenium oxychloride
2857	126	containing non-flammable, non-poisonous, liquefied gas Refrigerating machines,	2880	140	Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 10% water
la ri		containing non-flammable, non-poisonous, non- corrosive, liquefied gas	2880	140	Calcium hypochlorite, hydrated mixture, with not less than 5.5% but not more than 10%
2857	126	Refrigerating machines,		1	water
		containing non-flammable, non-toxic, liquefied gas			Metal catalyst, dry
2857	126	Refrigerating machines,	2881	135	Nickel catalyst, dry
2001	120	containing non-flammable, non-toxic, non-corrosive,	2883	145	2,2-Di-(tert-butylperoxy)- propane
1		liquefied gas	2884	145	
2858	170	Zirconium, dry, coiled wire, finished metal sheets or strips			propane

ID No.	Guid No.		ID No.	Guid No.	
2885	145	1,1-Di-(tert-butylperoxy)- cyclohexane	2902	151	Pesticide, liquid, poisonous, n.o.s.
2886	148	tert-Butyl peroxy-2- ethylhexanoate, with 2,2-Di- (tert-butylperoxy)butane	2902 2903		Pesticide, liquid, toxic, n.o.s.  Pesticide, liquid, poisonous, flammable, n.o.s.
2887	145	tert-Butyl peroxy-2- ethylhexanoate, with 2,2-Di- (tert-butylperoxy)butane	2903	131	Pesticide, liquid, toxic, flammable, n.o.s.
2888	148	tert-Butyl peroxy-2-	2904	154	Chlorophenates, liquid
2000	140	ethylhexanoate, not more than	2904	154	Chlorophenolates, liquid
		50%, with phlegmatizer	2904	154	Phenolates, liquid
2889	148	Diisotridecyl peroxydicarbonate	2905	154	Chlorophenates, solid
2890	145	tert-Butyl peroxybenzoate	2905	154	Chlorophenolates, solid
2891	148	tert-Amyl peroxyneodecanoate	2905	154	Phenolates, solid
2892	148	Dimyristyl peroxydicarbonate, not more than 42%, in water	2906	127	Triisocyanatoisocyanurate of Isophoronediisocyanate,
2893	145	Lauroyl peroxide, not more than			solution (70%)
		42%, stable dispersion, in water	2907		Isosorbide dinitrate mixture
2894	148	Di-(4-tert-butylcyclohexyl)- peroxydicarbonate	2908		Radioactive material, empty packages
2895	148	Dicetyl peroxydicarbonate, not more than 42%, in water	2909	161	Radioactive material, articles manufactured from depleted Uranium
2896	147	Cyclohexanone peroxide, not more than 72% as a paste	2909	161	Radioactive material, articles manufactured from natural
2897	145	1,1-Di-(tert-butylperoxy)- cyclohexane	2909	161	Thorium  Radioactive material, articles
2898	148	tert-Amyl peroxy-2- ethylhexanoate			manufactured from natural Uranium
2899	148	Organic peroxides, n.o.s. (including trial quantities)	2910	161	Radioactive material, excepted package, articles
2900	158	Infectious substance, affecting animals only			manufactured from depleted Uranium
2901	124	Bromine chloride	2910	161	Radioactive material, excepted package, articles
2902	151	Allethrin			manufactured from natural
2902	151	Insecticide, liquid, poisonous, n.o.s.			Thorium

No.	No.		No.	No	· · · · · · · · · · · · · · · · · · ·
2910	161	Radioactive material, excepted	2924	132	Dichlorobutene
K		package, articles manufactured from natural Uranium	2924	132	Flammable liquid, corrosive, n.o.s
2910	161	Radioactive material, excepted package, empty packaging	2925	134	Flammable solid, corrosive, n.o.s.
2910	161	Radioactive material, excepted package, instruments or	2925	134	Flammable solid, corrosive, organic, n.o.s.
		articles	2926	134	Flammable solid, poisonous,
2910	161	Radioactive material, excepted package, limited quantity of material	2926	134	Flammable solid, poisonous, organic, n.o.s.
2910	161	Radioactive material, limited quantity, n.o.s.	2926	134	Flammable solid, toxic, organic, n.o.s.
2911	161	Radioactive material, instruments and articles	2927	154	Ethyl phosphonothioic dichloride, anhydrous
2912	162		2927	154	
0040	400	specific activity (LSA), n.o.s.	2927	154	Poisonous liquid, corrosive, n.o.s.
2913	162	Radioactive material, surface contaminated objects (SCO)	2927	154	Poisonous liquid, corrosive,
2918	165	Radioactive material, fissile, n.o.s.			n.o.s. (Inhalation Hazard Zone A)
2920		Corrosive liquid, flammable, n.o.s.	2927	154	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)
2920		Dichlorobutene	2927	154	Toxic liquid, corrosive, organic,
2921	134	Corrosive solid, flammable, n.o.s.			n.o.s.
2922	154	Corrosive liquid, poisonous, n.o.s.	2927	154	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)
2922	154	Corrosive liquid, toxic, n.o.s.	2927	154	Toxic liquid, corrosive, organic,
2922		Sodium hydrosulfide, solution			n.o.s. (Inhalation Hazard Zone B)
2922		Sodium hydrosulphide, solution	2928	154	
2923	154	Corrosive solid, poisonous, n.o.s.			n.o.s.
		Corrosive solid, toxic, n.o.s.	2928	154	Toxic solid, corrosive, organic, n.o.s.
		Sodium hydrosulfide, solid	2929	131	
2923	154	Sodium hydrosulphide, solid			

ID Guide Name of Material No. No.	No. No.
2929 131 Poisonous liquid, flammable,	2933 132 Methyl 2-chloropropionate
n.o.s.	2934 132 Isopropyl 2-chloropropionate
2929 131 Poisonous liquid, flammable, n.o.s. (Inhalation Hazard	2935 132 Ethyl 2-chloropropionate
Zone A)	2936 153 Thiolactic acid
2929 131 Poisonous liquid, flammable,	2937 153 alpha-Methylbenzyl alcohol
n.o.s. (Inhalation Hazard	2937 153 Methylbenzyl alcohol (alpha)
Zone B)	2938 152 Methyl benzoate
2929 131 Poisonous liquid, flammable, organic, n.o.s.	2940 135 Cyclooctadiene phosphines
2929 131 Poisonous liquid, flammable,	2940 135 9-Phosphabicyclononanes
organic, n.o.s. (Inhalation	2941 153 Fluoroanilines
Hazard Zone A)	2942 <b>153</b> 2-Trifluoromethylaniline
2929 131 Poisonous liquid, flammable, organic, n.o.s. (Inhalation	2943 <b>129</b> Tetrahydrofurfurylamine
Hazard Zone B)	2945 132 N-Methylbutylamine
2929 131 Toxic liquid, flammable, n.o.s.	2946 153 2-Amino-5-diethylaminopentane
2929 131 Toxic liquid, flammable, n.o.s.	2947 155 Isopropyl chloroacetate
(Inhalation Hazard Zone A)	2948 <b>153</b> 3-Trifluoromethylaniline
2929 <b>131</b> Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	2949 <b>154</b> Sodium hydrosulfide, with not less than 25% water of
2929 131 Toxic liquid, flammable, organic,	crystallization
n.o.s.	2949 <b>154</b> Sodium hydrosulphide, with not less than 25% water of
2929 <b>131</b> Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard	crystallization
Zone A)	2950 138 Magnesium granules, coated
2929 131 Toxic liquid, flammable, organic,	2951 <b>149</b> Diphenyloxide-4,4'-
n.o.s. (Inhalation Hazard Zone B)	disulfohydrazide
2930 134 Poisonous solid, flammable,	2951 149 Diphenyloxide-4,4'- disulphohydrazide
n.o.s.	2952 <b>150</b> Azodiisobutyronitrile
2930 134 Poisonous solid, flammable, organic, n.o.s.	2953 <b>150</b> 2,2'-Azodi-(2,4-dimethylvaleronitrile)
2930 134 Toxic solid, flammable, n.o.s.	2954 <b>149</b> 1,1'-Azodi-
2930 134 Toxic solid, flammable, organic,	(hexahydrobenzonitrile)
n.o.s.	2955 <b>150</b> 2,2'-Azodi-(2,4-dimethyl-4-
2931 151 Vanadyl sulfate	methoxyvaleronitrile)
2931 151 Vanadyl sulphate	2956 <b>149</b> 5-tert-Butyl-2,4,6-trinitro-
Page 70	m-xylene

ID No.	Guid No.		ID No.	Guid No.	
2956	149	Musk xylene	2979	162	Uranium metal, pyrophoric
2965	139	Boron trifluoride dimethyl etherate	2980	162	Uranyl nitrate, hexahydrate, solution
2966	153	Thioglycol	2981	162	Uranyl nitrate, solid
2967	154	Sulfamic acid	2982	163	Radioactive material, n.o.s.
2967	154	Sulphamic acid	2983	129F	P Ethylene oxide and Propylene
2968	135	Maneb, stabilized			oxide mixture, with not more than 30% Ethylene oxide
2968	135	Maneb preparation, stabilized	2083	1205	Propylene oxide and Ethylene
2969	171	Castor beans, meal, pomace or flake	2303	1231	oxide mixture, with not more than 30% Ethylene oxide
2970	149	Benzene sulfohydrazide	2984	140	Hydrogen peroxide, aqueous
2970	149	Benzene sulphohydrazide			solution, with not less than 8%
2971	149	Benzene-1,3-disulfohydrazide			but less than 20% Hydrogen peroxide
2971	149	Benzene-1,3-disulphohydrazide	2985	155	Chlorosilanes, flammable,
2972	149	N,N'-Dinitrosopentamethylene tetramine	2985	455	corrosive, n.o.s.
2973	149	N,N'-Dinitroso-N,N'-dimethyl			Chlorosilanes, n.o.s. Chlorosilanes, corrosive,
		terephthalamide	2986	133	flammable, n.o.s.
2974	164	Radioactive material, special form, n.o.s.	2986		Chlorosilanes, n.o.s.
2975	162	Thorium metal, pyrophoric	2987	156	Chlorosilanes, corrosive, n.o.s.
2976	162	Thorium nitrate, solid	2987	156	Chlorosilanes, n.o.s.
2977	166	Radioactive material, Uranium	2988	139	Chlorosilanes, n.o.s.
2977	166	hexafluoride, fissile Uranium hexafluoride, fissile	2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.
		containing more than 1%	2989	133	Lead phosphite, dibasic
		Uranium-235	2990	171	Aircraft evacuation slides
2978	166	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted	2990	171	Life-saving appliances, self- inflating
2978	166	Uranium hexafluoride, fissile	2991	131	Carbamate pesticide, liquid, poisonous, flammable
2978	166	Uranium hexafluoride, low	2991	131	Carbamate pesticide, liquid, toxic, flammable
2978	166	specific activity Uranium hexafluoride, non-	2992	151	Carbamate pesticide, liquid, poisonous
۱		fissile			

	ID No.	Gui No		ID No.	Gui No	
	2992	151	Carbamate pesticide, liquid, toxic	3002	151	Phenyl urea pesticide, liquid, toxic
	2993	131	Arsenical pesticide, liquid, poisonous, flammable	3003	131	Benzoic derivative pesticide, liquid, poisonous, flammable
	2993	131	Arsenical pesticide, liquid, toxic, flammable	3003	131	Benzoic derivative pesticide, liquid, toxic, flammable
	2994	151	Arsenical pesticide, liquid, poisonous	3004	151	Benzoic derivative pesticide, liquid, poisonous
	2994	151	Arsenical pesticide, liquid, toxic	3004	151	Benzoic derivative pesticide,
	2995	131	Organochlorine pesticide, liquid, poisonous, flammable	3005	131	liquid, toxic  Dithiocarbamate pesticide.
	2995	131	Organochlorine pesticide, liquid,	3003	131	liquid, poisonous, flammable
			toxic, flammable	3005	131	Dithiocarbamate pesticide,
	2996	151	Organochlorine pesticide, liquid, poisonous	3006	151	liquid, toxic, flammable  Dithiocarbamate pesticide,
	2996	151	Organochlorine pesticide, liquid,	3000	131	liquid, poisonous
			toxic	3006	151	Dithiocarbamate pesticide,
	2997	131	Triazine pesticide, liquid, poisonous, flammable	3007	131	liquid, toxic  Phthalimide derivative
	2997	131	Triazine pesticide, liquid, toxic, flammable	3007	131	pesticide, liquid, poisonous, flammable
	2998	151	Triazine pesticide, liquid, poisonous	3007	131	Phthalimide derivative pesticide, liquid, toxic, flammable
	2998	151	Triazine pesticide, liquid, toxic	3008	151	Phthalimide derivative
	2999	131	Phenoxy pesticide, liquid, poisonous, flammable			pesticide, liquid, poisonous
	2999	131	Phenoxy pesticide, liquid, toxic, flammable	3008	151	Phthalimide derivative pesticide, liquid, toxic
	3000	152	Phenoxy pesticide, liquid, poisonous	3009	131	Copper based pesticide, liquid, poisonous, flammable
	3000	152	Phenoxy pesticide, liquid, toxic	3009	131	Copper based pesticide, liquid, toxic, flammable
ľ	3001	131	Phenyl urea pesticide, liquid, poisonous, flammable	3010	151	Copper based pesticide, liquid, poisonous
	3001	131	Phenyl urea pesticide, liquid, toxic, flammable	3010	151	Copper based pesticide, liquid, toxic
	3002	151	Phenyl urea pesticide, liquid, poisonous	3011	131	Mercury based pesticide, liquid, poisonous, flammable

ID Gui		ID Guide Name of Material No. No.
3011 <b>131</b>	Mercury based pesticide, liquid, toxic, flammable	3020 153 Organotin pesticide, liquid, poisonous
3012 <b>151</b>	Mercury based pesticide, liquid, poisonous	3020 153 Organotin pesticide, liquid, toxic 3021 131 Pesticide, liquid, flammable,
3012 <b>151</b>	Mercury based pesticide, liquid, toxic	poisonous 3021 131 Pesticide, liquid, flammable,
3013 <b>131</b>	Substituted nitrophenol pesticide, liquid, poisonous, flammable	toxic 3022 127P 1,2-Butylene oxide, stabilized
3013 <b>131</b>		3023 131 2-Methyl-2-hepthanethiol
0010 101	pesticide, liquid, toxic,	3023 131 tert-Octyl mercaptan
3014 <b>153</b>	flammable Substituted nitrophenol	3024 131 Coumarin derivative pesticide, liquid, flammable, poisonous
3014 153	pesticide, liquid, poisonous	3024 131 Coumarin derivative pesticide, liquid, flammable, toxic
3015 <b>131</b>	pesticide, liquid, toxic	3025 131 Coumarin derivative pesticide, liquid, poisonous, flammable
1-25	poisonous, flammable	3025 131 Coumarin derivative pesticide, liquid, toxic, flammable
3015 <b>131</b>	toxic, flammable	3026 151 Coumarin derivative pesticide,
3016 <b>151</b>	Bipyridilium pesticide, liquid, poisonous	liquid, poisonous  3026 151 Coumarin derivative pesticide,
3016 <b>151</b>		liquid, toxic
3017 <b>131</b>	3	3027 151 Coumarin derivative pesticide, solid, poisonous
3017 <b>131</b>	liquid, poisonous, flammable Organophosphorus pesticide,	3027 151 Coumarin derivative pesticide, solid, toxic
3018 <b>152</b>	liquid, toxic, flammable  Methyl parathion, liquid	3028 <b>154</b> Batteries, dry, containing Potassium hydroxide, solid
3018 <b>152</b>		3030 150 2,2'-Azodi-(2-methyl- butyronitrile)
3018 <b>152</b>	Organophosphorus pesticide,	3031 149 Self-reactive substances, samples, n.o.s.
3018 <b>152</b>	Tetraethyl pyrophosphate, liquid	3032 149 Self-reactive substances, trial quantities, n.o.s.
3019 <b>131</b>	Organotin pesticide, liquid, poisonous, flammable	3033 149 3-Chloro-4-diethylamino- benzenediazonium
3019 <b>131</b>	Organotin pesticide, liquid, toxic, flammable	zinc chloride

ID Guide Name of Material No. No.	No. No.
3034 149 4-Dipropylaminobenzene-	3051 135 Aluminum alkyls
diazonium zinc chloride	3052 135 Aluminum alkyl halides
3035 <b>150</b> 3-(2-Hydroxyethoxy)-4-	3053 135 Magnesium alkyls
pyrrolidin-1-yl benzene- diazonium zinc chloride	3054 131 Cyclohexanethiol
3036 <b>150</b> 2,5-Diethoxy-4-morpholino-	3054 131 Cyclohexyl mercaptan
benzenediazonium	3055 153 2-(2-Aminoethoxy)ethanol
zinc chloride	3056 <b>129</b> n-Heptaldehyde
3037 <b>149</b> 4-[Benzyl(ethyl)amino]-3- ethoxybenzenediazonium	3057 125 Trifluoroacetyl chloride
zinc chloride	3064 127 Nitroglycerin, solution in
3038 <b>150</b> 4-[Benzyl(methyl)amino]-3-	alcohol, with more than 1% but not more than 5%
ethoxybenzenediazonium zinc chloride	Nitroglycerin
3039 <b>150</b> 4-Dimethylamino-6-(2-dimethyl-	3065 127 Alcoholic beverages
aminoethoxy)toluene-2-	3066 153 Paint (corrosive)
diazonium zinc chloride	3066 153 Paint related material (corrosive)
3040 <b>149</b> Sodium 2-diazo-1-naphthol-4- sulfonate	3070 <b>126</b> Dichlorodifluoromethane and
3040 149 Sodium 2-diazo-1-naphthol-4-	Ethylene oxide mixture, with
sulphonate	not more than 12.5% Ethylene oxide
3041 <b>149</b> Sodium 2-diazo-1-naphthol-5- sulfonate	3070 126 Dichlorodifluoromethane and
3041 149 Sodium 2-diazo-1-naphthol-5-	Ethylene oxide mixtures, with
sulphonate	not more than 12% Ethylene oxide
3042 149 2-Diazo-1-naphthol-4-	3070 <b>126</b> Ethylene oxide and
sulfochloride	Dichlorodifluoromethane
3042 <b>149</b> 2-Diazo-1-naphthol-4- sulphochloride	mixture, with not more than 12.5% Ethylene oxide
3043 <b>149</b> 2-Diazo-1-naphthol-5-	3070 <b>126</b> Ethylene oxide and
sulfochloride	Dichlorodifluoromethane
3043 <b>149</b> 2-Diazo-1-naphthol-5- sulphochloride	mixtures, with not more than 12% Ethylene oxide
3048 157 Aluminum phosphide pesticide	3071 131 Mercaptan mixture, liquid,
3049 138 Metal alkyl halides, n.o.s.	poisonous, flammable, n.o.s.
3049 138 Metal aryl halides, n.o.s.	3071 131 Mercaptan mixture, liquid, toxic,
3050 138 Metal alkyl hydrides, n.o.s.	flammable, n.o.s. 3071 <b>131</b> Mercaptan mixtures, liquid,
3050 138 Metal aryl hydrides, n.o.s.	n.o.s.
Dogo 74	

No.	No.	No. No.
3071	131 Mercaptans, liquid, n.o.s.	3085 141 Oxidizing substances, solid,
3071	131 Mercaptans, liquid, poisonous, flammable, n.o.s.	corrosive, n.o.s. 3086 141 Poisonous solid, oxidizing,
3071		n.o.s.
0071	flammable, n.o.s.	3086 141 Toxic solid, oxidizing, n.o.s.
3072	171 Aircraft survival kits	3087 141 Oxidizing solid, poisonous,
3072	171 Life-saving appliances, not self-inflating	n.o.s. 3087 141 Oxidizing solid, toxic, n.o.s.
3073	131P Vinylpyridines, inhibited	3087 141 Oxidizing substances, solid,
3076	138 Aluminum alkyl hydrides	poisonous, n.o.s.
3077	171 Environmentally hazardous substances, solid, n.o.s.	3087 141 Oxidizing substances, solid, toxic, n.o.s.
3077		3088 135 Self-heating solid, organic,
3077	171 Other regulated substances, solid, n.o.s.	3088 135 Self-heating substances, solid,
3078	138 Cerium, turnings or gritty powder	3089 170 Metal powder, flammable, n.o.s.
3079	131P Methacrylonitrile, inhibited	3090 138 Lithium batteries
3080	155 Isocyanate solution, poisonous, flammable, n.o.s.	3090 138 Lithium batteries, liquid or solid cathode
3080	155 Isocyanate solution, toxic, flammable, n.o.s.	3091 138 Lithium batteries contained in equipment
3080	155 Isocyanate solutions, n.o.s.	3091 138 Lithium batteries packed with
3080	155 Isocyanates, n.o.s.	equipment
3080	155 Isocyanates, poisonous, flammable, n.o.s.	3092 <b>129</b> 1-Methoxy-2-propanol
3080		3093 140 Corrosive liquid, oxidizing, n.o.s.
3082	171 Environmentally hazardous	3094 138 Corrosive liquid, water-reactive, n.o.s.
3082	substances, liquid, n.o.s.  171 Hazardous waste, liquid, n.o.s.	3094 138 Corrosive liquid, which in contact with water emits
3082		flammable gases, n.o.s.
	liquid, n.o.s.	3095 136 Corrosive solid, self-heating,
3083		n.o.s.
3084	5,	nns
3085	141 Oxidizing solid, corrosive, n.o.s.	11.0.0.

ID Guide Name of Material ID Guide Name of Material

ID Guide No. No.	Name of Material	ID No.	Guid No.		aterial
	rosive solid, which in contact with water emits flammable	3114	148	Organic peroxide typ	
	ases, n.o.s. mmable solid, oxidizing,	3115	148	Organic peroxide typ temperature contr	
	.o.s. dizing liquid, corrosive,	3116	148	Organic peroxide typ	
	.o.s. dizing substances, liquid,	3117	148	Organic peroxide typ	
	orrosive, n.o.s. dizing liquid, poisonous, n.o.s.	3118	148	Organic peroxide typ	
3099 <b>142</b> Oxid	dizing liquid, toxic, n.o.s.	3119	148	Organic peroxide typ	
p	dizing substances, liquid, oisonous, n.o.s.	3120	148	Organic peroxide typ	
to	dizing substances, liquid, oxic, n.o.s.	3121	144	Oxidizing solid, water	
n.	dizing solid, self-heating, .o.s. dizing substances, self-	3121	144	Oxidizing substance which in contact w	
h	eating, n.o.s.	3122	142	emit flammable ga	
Se	dizing substances, solid, elf-heating, n.o.s.	3122		n.o.s. Poisonous liquid, ox	
	anic peroxide type B, liquid anic peroxide type B, solid	3122	172	n.o.s. (Inhalation I Zone A)	
	anic peroxide type C, liquid anic peroxide type C, solid	3122	142	Poisonous liquid, ox n.o.s. (Inhalation I	
3105 <b>145</b> Org	anic peroxide type D, liquid	3122	142	Zone B)  Toxic liquid, oxidizin	
	anic peroxide type D, solid anic peroxide type E, liquid	3122		Toxic liquid, oxidizin (Inhalation Hazard	g, n.o.s.
	anic peroxide type E, solid anic peroxide type F, liquid	3122	142	Toxic liquid, oxidizin (Inhalation Hazard	g, n.o.s.
3110 <b>145</b> Orga	anic peroxide type F, solid	3123	139	Poisonous liquid, wa	
te	anic peroxide type B, liquid, emperature controlled	3123	139	reactive, n.o.s.  Poisonous liquid, wa	
te	anic peroxide type B, solid, emperature controlled			reactive, n.o.s. (In Hazard Zone A)	nalation
	anic peroxide type C, liquid, emperature controlled				

Page 76

ID No.	Guide Name of Material No.	ID Gui	ide Name of Material
3123	139 Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone B)	3125 <b>139</b>	Poisonous solid, which in contact with water emits flammable gases, n.o.s.
3123	contact with water emits	3125 <b>139</b>	Toxic solid, water-reactive, n.o.s.
3123	contact with water emits	3125 <b>139</b>	Toxic solid, which in contact with water emits flammable gases, n.o.s.
	flammable gases, n.o.s. (Inhalation Hazard Zone A)	3126 <b>136</b>	Self-heating solid, corrosive, organic, n.o.s.
3123	139 Poisonous liquid, which in contact with water emits flammable gases, n.o.s.	3126 <b>136</b>	S Self-heating substance, solid, corrosive, n.o.s.
	(Inhalation Hazard Zone B)	3127 <b>135</b>	<ul><li>Self-heating solid, oxidizing, n.o.s.</li></ul>
3123	n.o.s.	3127 <b>135</b>	Self-heating substances, solid, oxidizing, n.o.s.
3123	139 Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	3128 <b>136</b>	
3123	139 Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard	3128 <b>136</b>	Self-heating solid, organic, toxic, n.o.s.
3123	Zone B)  139 Toxic liquid, which in contact	3128 <b>136</b>	S Self-heating solid, poisonous, organic, n.o.s.
0120	with water emits flammable gases, n.o.s.	3128 <b>136</b>	Self-heating solid, toxic, organic, n.o.s.
3123	with water emits flammable	3128 <b>136</b>	S Self-heating substances, solid, poisonous, n.o.s.
	gases, n.o.s. (Inhalation Hazard Zone A)	3128 <b>136</b>	S Self-heating substances, solid, toxic, n.o.s.
3123	139 Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	3129 <b>138</b>	Substances, which in contact with water emit flammable gases, liquid, corrosive, n.o.s.
3124	136 Poisonous solid, self-heating,	3129 <b>138</b>	Water-reactive liquid, corrosive, n.o.s.
3124	n.o.s.  136 Toxic solid, self-heating, n.o.s.	3129 <b>138</b>	Water-reactive substances, liquid, corrosive, n.o.s.
3125	139 Poisonous solid, water-reactive, n.o.s.	3130 <b>139</b>	

n.o.s.

ID Guide No.	ime of Material		Guid No.	
with w	ces, which in contact ater emit flammable , liquid, toxic, n.o.s.	3134	139	Substances, which in contact with water emit flammable gases, solid, toxic, n.o.s.
	eactive liquid, nous, n.o.s.	3134	139	Water-reactive solid, poisonous n.o.s.
3130 <b>139</b> Water-re n.o.s.	eactive liquid, toxic,	3134 3134		
	eactive substances, , poisonous, n.o.s.	3134		solid, poisonous, n.o.s. Water-reactive substances,
	eactive substances, , toxic, n.o.s.	3135	138	solid, toxic, n.o.s. Substances, which in contact
with w	ces, which in contact rater emit flammable , solid, corrosive, n.o.s.			with water emit flammable gases, solid, self-heating, n.o.s.
3131 <b>138</b> Water-re n.o.s.	eactive solid, corrosive,	3135	138	Water-reactive solid, self- heating, n.o.s.
3131 <b>138</b> Water-re solid,	eactive substances, corrosive, n.o.s.	3135	138	Water-reactive substances, solid, self-heating, n.o.s.
	ces, which in contact vater emit flammable	3136	120	Trifluoromethane, refrigerated liquid
gases n.o.s.	, solid, flammable,	3137	140	Oxidizing solid, flammable, n.o.s.
3132 <b>138</b> Water-renno.s.	eactive solid, flammable,	3137	140	Oxidizing substances, solid, flammable, n.o.s.
	eactive substances, flammable, n.o.s.	3138	116	Acetylene, Ethylene and Propylene in mixture,
with w	ces, which in contact vater emit flammable s, solid, oxidizing, n.o.s.			refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5%
3133 <b>138</b> Water-renno.s.	eactive solid, oxidizing,			Acetylene and not more than 6% Propylene.
3133 <b>138</b> Water-re solid,	eactive substances, oxidizing, n.o.s.	3138	116	Propylene in mixture,
with v	ces, which in contact vater emit flammable s, solid, poisonous,			refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene.

3138 116 Propylene, Ethylene and Acetylene in mixture,  3148 138 Substances, which in co-with water emit flamm	
refrigerated liquid containing gases, liquid, n.o.s.	labic
at least 71.5% Ethylene with not more than 22.5%	.o.s.
Acetylene and not more than 6% Propylene.  3148 138 Water-reactive substan liquid, n.o.s.	ces,
3139 140 Oxidizing liquid, n.o.s. 3149 140 Hydrogen peroxide and	-11-31-34-1
3139 140 Oxidizing substances, liquid, n.o.s.  Peroxyacetic acid mix with acid(s), water an more than 5% Peroxy	id not
3140 151 Alkaloids, liquid, n.o.s. acid, stabilized	
3140 151 Alkaloid salts, liquid, n.o.s. powered, with release	e device
(poisonous) 3150 115 Hydrocarbon gas refills devices, with release	
liquid, n.o.s. 3151 171 Polyhalogenated bipher	
3142 151 Disinfectant, liquid, poisonous, liquid	
3151 171 Polyhalogenated terphe 3142 151 Disinfectant, liquid, toxic, n.o.s.	enyls,
3142 151 Disinfectants, liquid, n.o.s. 3152 171 Polyhalogenated bipher (poisonous) solid	nyls,
3143 151 Dye, solid, poisonous, n.o.s. 3152 171 Polyhalogenated terphe	enyls,
3143 151 Dye, Solid, Toxic, n.o.s.	hor
3143 151 Dye intermediate, solid, poisonous, n.o.s. 3153 115 Perfluoro(methylvinyl et	
3143 151 Dye intermediate, solid, toxic, 3154 115 Perfluoroethyl vinyl ethe	
n.o.s. 3154 115 Perfluoro(ethylvinyl eth	
3144 151 Nicotine compound, liquid, 3155 154 Pentachlorophenol	
n.o.s. 3156 122 Compressed gas, oxidiz	zing,
3144 151 Nicotine preparation, liquid, n.o.s.	
3145 153 Alkyl phenols liquid n.o.s	
(including C2-C12 3158 120 Gas, refrigerated liquid,	
homologues) 3159 126 Refrigerant gas R-134a	
3146 153 Organotin compound, solid, n.o.s. 3159 126 1,1,1,2-Tetrafluoroetha	
3147 154 Dye, solid, corrosive, n.o.s. flammable, n.o.s.	
3147 154 Dye intermediate, solid, corrosive, n.o.s.	Page 79

Page 79

ID Guide Name of Material ID Guide Name of Material

ID Guid		ID No.	Guie No.	
3160 119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)
3160 <b>119</b>	Hazard Zone A) Liquefied gas, poisonous,	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)
	flammable, n.o.s. (Inhalation Hazard Zone B)	3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)
3160 119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation	3163		Liquefied gas, n.o.s.
3160 <b>119</b>	Hazard Zone C) Liquefied gas, poisonous,	3164	126	Articles, pressurized, hydraulic (containing non-flammable
3100 113	flammable, n.o.s. (Inhalation Hazard Zone D)	3164	126	gas) Articles, pressurized, pneumatic (containing non-flammable
3160 119	Liquefied gas, toxic, flammable, n.o.s.			gas)
3160 119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard	3165	131	Aircraft hydraulic power unit fuel tank
	Zone A)	3166	128	Engines, internal combustion, including when fitted in
3160 119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard	3167	115	machinery or vehicles Gas sample, non-pressurized,
3160 <b>119</b>	Zone B) Liquefied gas, toxic, flammable,	0107		flammable, n.o.s., not refrigerated liquid
	n.o.s. (Inhalation Hazard Zone C)	3168	119	Gas sample, non-pressurized,
3160 <b>119</b>	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard	F		poisonous, flammable, n.o.s., not refrigerated liquid
0404 445	Zone D)	3168	119	Gas sample, non-pressurized, toxic, flammable, n.o.s., not
3161 <b>115</b> 3162 <b>123</b>	Liquefied gas, flammable, n.o.s.  Liquefied gas, poisonous, n.o.s.			refrigerated liquid
3162 123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	3169	123	Gas sample, non-pressurized, poisonous, n.o.s., not refrigerated liquid
3162 <b>123</b>	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	3169	123	Gas sample, non-pressurized, toxic, n.o.s., not refrigerated
3162 123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	3170	138	liquid Aluminum dross
3162 123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	3170	138	Aluminum processing by-products
3162 123	Liquefied gas, toxic, n.o.s.	3170	138	Aluminum remelting by-products
3162 123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	3170	138	Aluminum smelting by-products

ID No.	Gui No.		ID No.	Gui No	
3171	154	Battery-powered equipment (wet battery)	3186	135	Self-heating liquid, inorganic, n.o.s.*
3171	154	Battery-powered vehicle (wet battery)	3187	136	Self-heating liquid, poisonous, inorganic, n.o.s.
3171	154	Wheelchair, electric, with batteries	3187	136	Self-heating liquid, toxic, inorganic, n.o.s.
3172	153	Toxins, extracted from living sources, n.o.s.	3188	136	Self-heating liquid, corrosive, inorganic, n.o.s.
3174	135	Titanium disulfide	3189	135	Metal powder, self-heating,
3174	135	Titanium disulphide	1.72		n.o.s.
3175	133	Solids containing flammable liquid, n.o.s.	3189	135	Self-heating metal powders, n.o.s.
3176	133	Flammable solid, organic, molten, n.o.s.	3190	135	Self-heating solid, inorganic, n.o.s.
3178	133	Flammable solid, inorganic, n.o.s.	3191	136	Self-heating solid, inorganic, poisonous, n.o.s.
3178	133	Smokeless powder for small arms	3191	136	Self-heating solid, inorganic, toxic, n.o.s.
3179	134	Flammable solid, poisonous, inorganic, n.o.s.	3191	136	Self-heating solid, poisonous, inorganic, n.o.s.
3179	134	Flammable solid, toxic, inorganic, n.o.s.	3191	136	Self-heating solid, toxic, inorganic, n.o.s.
3180	134	Flammable solid, corrosive, inorganic, n.o.s.	3192	136	Self-heating solid, corrosive, inorganic, n.o.s.
3180	134	Flammable solid, inorganic, corrosive, n.o.s.	3194	135	Pyrophoric liquid, inorganic, n.o.s.
3181	133	Metal salts of organic compounds, flammable, n.o.s.	3200	135	Pyrophoric solid, inorganic, n.o.s.
3182	170	Metal hydrides, flammable,	3203	135	Pyrophoric organometallic compound, n.o.s.
3183	135	Self-heating liquid, organic, n.o.s.	3205	135	Alkaline earth metal alcoholates, n.o.s.
3184	136	Self-heating liquid, poisonous, organic, n.o.s.	3206	136	Alkali metal alcoholates, self- heating, corrosive, n.o.s.
3184	136	Self-heating liquid, toxic, organic, n.o.s.	3207	138	water-reactive, flammable,
3185	136	Self-heating liquid, corrosive, organic, n.o.s.			n.o.s.
					Page 8

ID No.	Gui		ID No.	Gui	
3207	138	Organometallic compound	3226	149	Self-reactive solid type D
		dispersion, water-reactive,	3227	149	Self-reactive liquid type E
2227	420	flammable, n.o.s.	3228	149	Self-reactive solid type E
3207	138	Organometallic compound solution, water-reactive,	3229	149	Self-reactive liquid type F
		flammable, n.o.s.	3230	149	Self-reactive solid type F
3208	138	Metallic substance, water- reactive, n.o.s.	3231	150	Self-reactive liquid type B, temperature controlled
3209	138	Metallic substance, water- reactive, self-heating, n.o.s.	3232	150	Self-reactive solid type B, temperature controlled
3210	140	Chlorates, inorganic, aqueous solution, n.o.s.	3233	150	Self-reactive liquid type C, temperature controlled
3211	140	Perchlorates, inorganic, aqueous solution, n.o.s.	3234	150	Self-reactive solid type C, temperature controlled
3212	140	Hypochlorites, inorganic, n.o.s.	3235	150	Self-reactive liquid type D,
3213	140		-		temperature controlled
		solution, n.o.s.	3236	150	Self-reactive solid type D, temperature controlled
3214	140	Permanganates, inorganic, aqueous solution, n.o.s.	3237	150	Self-reactive liquid type E,
3215	140	Persulfates, inorganic, n.o.s.	3231	130	temperature controlled
		Persulphates, inorganic, n.o.s.	3238	150	Self-reactive solid type E,
		Persulfates, inorganic, aqueous			temperature controlled
		solution, n.o.s. Persulphates, inorganic,	3239	150	Self-reactive liquid type F, temperature controlled
		aqueous solution, n.o.s.	3240	150	Self-reactive solid type F, temperature controlled
	140	3	3241	133	2-Bromo-2-nitropropane-1,3-dic
3210	140	Nitrates, inorganic, aqueous solution, n.o.s.	3242	149	Azodicarbonamide
3219	140	Nitrites, inorganic, aqueous solution, n.o.s.	3243	151	Solids containing poisonous liquid, n.o.s.
3220	126	Pentafluoroethane	3243	151	Solids containing toxic liquid,
3220	126	Refrigerant gas R-125	Э,		n.o.s.
3221	149	Self-reactive liquid type B	3244	154	Solids containing corrosive liquid, n.o.s.
3222	149	Self-reactive solid type B	3245	171	Genetically modified micro-
3223	149	Self-reactive liquid type C	0240	17.1	organisms
3224	149	Self-reactive solid type C	3246	156	Methanesulfonyl chloride
3225	149	Self-reactive liquid type D	3246	156	Methanesulphonyl chloride
Page 8.	2				

ID Gu No. No	uide Name of Material	ID No.	Gui No.	
3247 14	O Sodium peroxoborate, anhydrous	3260	154	Corrosive solid, acidic, inorgánic, n.o.s.
3248 13	<ol> <li>Medicine, liquid, flammable, poisonous, n.o.s.</li> </ol>	3261	154	Corrosive solid, acidic, organic, n.o.s.
3248 13	1 Medicine, liquid, flammable, toxic, n.o.s.	3262	154	Corrosive solid, basic, inorganic, n.o.s.
3249 15	1 Medicine, solid, poisonous, n.o.s.	3263	154	Corrosive solid, basic, organic, – n.o.s.
3249 15	1 Medicine, solid, toxic, n.o.s.	3264	154	
3250 15	3 Chloroacetic acid, molten			inorganic, n.o.s.
3251 <b>13</b>	3 Isosorbide-5-mononitrate	3265	153	Corrosive liquid, acidic, organic, n.o.s.
3252 11	5 Difluoromethane	3266	154	Corrosive liquid, basic,
3252 11				inorganic, n.o.s.
3253 <b>15</b>		3267	153	Corrosive liquid, basic, organic,
3253 <b>15</b>	4 Disodium trioxosilicate, pentahydrate			n.o.s.
3254 13		3268		Air bag inflators
3254 13	the spirit in the same of the same of	3268		Air bag modules
3255 13		3268		Seat-belt modules
3256 12		3268		Seat-belt pre-tensioners
3230 12	flammable, n.o.s., with flash			Polyester resin kit .
	point above 37.8°C (100°F),	3270		Nitrocellulose membrane filters
	at or above its flash point	3271	127	Ethers, n.o.s.
3256 12	8 Elevated temperature liquid, flammable, n.o.s., with flash			Esters, n.o.s.
1000	point above 60.5°C (141°F), at or above its flash point	3273	131	Nitriles, flammable, poisonous, n.o.s.
3257 12		3273	131	Nitriles, flammable, toxic, n.o.s.
0207 12	n.o.s., at or above 100°C (212°F)and below its flash	3274	127	Alcoholates solution, n.o.s., in alcohol
	point	3275	131	Nitriles, poisonous, flammable,
3258 17	The state of the s			n.o.s.
	n.o.s., at or above 240°C (464°F)	3275		Nitriles, toxic, flammable, n.o.s.
3259 <b>15</b>		3276		Nitriles, poisonous, n.o.s.
3259 15		3276		Nitriles, toxic, n.o.s.
10	n.o.s.	3277	154	Chloroformates, poisonous, corrosive, n.o.s.

	ID No.	Gui		ID No.	Gui No	
	3277	154	Chloroformates, toxic,	3288	151	Toxic solid, inorganic, n.o.s.
	2270	151	corrośive, n.o.s.  Organophosphorus compound,	3289	154	Poisonous liquid, corrosive, inorganic, n.o.s.
	3210	151	poisonous, n.o.s.	3289	154	Poisonous liquid, corrosive,
	3278	151	Organophosphorus compound, toxic, n.o.s.	0200		inorganic, n.o.s. (Inhalation Hazard Zone A)
	3279	131	Organophosphorus compound, poisonous, flammable, n.o.s.	3289	154	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation
	3279	131	Organophosphorus compound, toxic, flammable, n.o.s.	3289	154	Hazard Zone B)  Toxic liquid, corrosive,
	3280	151	Organoarsenic compound, n.o.s.			inorganic, n.o.s.
	3281	151	Metal carbonyls, n.o.s.	3289	154	Toxic liquid, corrosive,
	3282	151	Organometallic compound, poisonous, n.o.s.			inorganic, n.o.s. (Inhalation Hazard Zone A)
	3282	151	Organometallic compound, toxic, n.o.s.	3289	154	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation
	3283	151	Selenium compound, n.o.s.	3290	154	Hazard Zone B)  Poisonous solid, corrosive,
	3284	151	Tellurium compound, n.o.s.	3230	134	inorganic, n.o.s.
	3285	151	Vanadium compound, n.o.s.	3290	154	Toxic solid, corrosive, inorganic
	3286	131	Flammable liquid, poisonous,	0004		n.o.s.
	2206	424	corrosive, n.o.s.	3291		(Bio)Medical waste, n.o.s.
	3286	131	Flammable liquid, toxic, corrosive, n.o.s.	3291	158	Clinical waste, unspecified, n.o.s.
	3287	151	Poisonous liquid, inorganic,	3291	158	Medical waste, n.o.s.
	2207	454	n.o.s.	3291	158	Regulated medical waste, n.o.s.
	3287	151	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard	3292	138	Batteries, containing Sodium
			Zone A)	3292		Cells, containing Sodium
	3287	151	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	3293	152	Hydrazine, aqueous solution, with not more than 37% Hydrazine
	3287	151	Toxic liquid, inorganic, n.o.s.	3294	131	Hydrogen cyanide, solution in
	3287	151	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)			alcohol, with not more than 45% Hydrogen cyanide
	3287	151	Toxic liquid, inorganic, n.o.s.	3295		Hydrocarbons, liquid, n.o.s.
			(Inhalation Hazard Zone B)	3296		Heptafluoropropane
	3288	151	Poisonous solid, inorganic, n.o.s.	3296	126	Refrigerant gas R-227
P	age 84	1				

No.	No.		No.	No.	
3297	126	Chlorotetrafluoroethane and Ethylene oxide mixture, with not more than 8.8% Ethylene oxide			Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)
3297	126	Ethylene oxide and Chlorotetrafluoroethane	3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)
		mixture, with not more than 8.8% Ethylene oxide	3303	124	Compressed gas, toxic, oxidizing, n.o.s.
3298	126	Ethylene oxide and Pentafluoroethane mixture, with not more than 7.9% Ethylene oxide	3303		oxidizing, n.o.s. (Inhalation Hazard Zone A)
3298	126	Pentafluoroethane and Ethylene oxide mixture, with not more than 7.9% Ethylene oxide			Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)
3299	126	Ethylene oxide and Tetrafluoroethane mixture, with not more than 5.6%	3303		Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)
3299	126	Ethylene oxide  Tetrafluoroethane and Ethylene oxide mixture, with not more	3303	124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)
2000	440	than 5.6% Ethylene oxide	3304	123	Compressed gas, poisonous, corrosive, n.o.s.
3300		Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide	3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)
3300		Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide	3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)
3301	136	Corrosive liquid, self-heating, n.o.s.	3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation
3302		2-Dimethylaminoethyl acrylate			Hazard Zone C)
		Compressed gas, poisonous, oxidizing, n.o.s.  Compressed gas, poisonous,	3304	123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)
		oxidizing, n.o.s. (Inhalation Hazard Zone A)	3304	123	Compressed gas, toxic, corrosive, n.o.s.
3303	124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)
		THE RESERVE OF THE PARTY OF THE			

ID

Guide Name of Material

Guide Name of Material

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
3304 123 Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	3306 124 Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
3304 123 Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	3306 <b>124</b> Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)
3304 123 Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	3306 <b>124</b> Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
3305 119 Compressed gas, poisonous, flammable, corrosive, n.o.s.	3306 124 Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
3305 119 Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	3306 <b>124</b> Compressed gas, toxic, oxidizing, corrosive, n.o.s.
3305 119 Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	3306 124 Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
3305 119 Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	3306 <b>124</b> Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)
3305 119 Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	3306 124 Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
3305 119 Compressed gas, toxic, flammable, corrosive, n.o.s.	3306 <b>124</b> Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
3305 119 Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	3307 <b>124</b> Liquefied gas, poisonous, oxidizing, n.o.s.
3305 119 Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	3307 <b>124</b> Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)
3305 119 Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	3307 <b>124</b> Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)
3305 119 Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	3307 <b>124</b> Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)
3306 124 Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	3307 <b>124</b> Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)

ID No.	Gui No		ID No.	Guid No.	
		Liquefied gas, toxic, oxidizing, n.o.s.	3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	3309	119	
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
3308		Liquefied gas, poisonous, corrosive, n.o.s.	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s.
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
3308	123	Liquefied gas, toxic, corrosive, n.o.s.	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	3310	124	Hazard Zone D)  Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)

ID Guide Name of Material No. No.	ID Guide Name of Material No. No.
3310 <b>124</b> Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	3318 125 Ammonia solution, with more than 50% Ammonia
(Inhalation Hazard Zone C) 3310 124 Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	3319 113 Nitroglycerin mixture with more than 2% but not more than 10% Nitroglycerin, desensitized
3310 124 Liquefied gas, toxic, oxidizing, corrosive, n.o.s.	3320 157 Sodium borohydride and Sodium hydroxide solution, with not
3310 124 Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	more than 12% Sodium borohydride and not more than 40% Sodium hydroxide
3310 124 Liquefied gas, toxic, oxidizing,	8000 171 Consumer commodity
corrosive, n.o.s. (Inhalation	8001 171 Dangerous goods in apparatus
Hazard Zone B)	8001 171 Dangerous goods in machinery
3310 <b>124</b> Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation	8013 171 Gas generator assemblies
Hazard Zone C)	8023 115 Refrigerating machines
3310 124 Liquefied gas, toxic, oxidizing,	8027 171 Other regulated substance
corrosive, n.o.s. (Inhalation Hazard Zone D)	8037 140 Oxygen generators, small
3311 122 Gas, refrigerated liquid,	8038 171 Heat producing article
oxidizing, n.o.s.	9011 <b>133</b> Camphene
3312 115 Gas, refrigerated liquid,	9018 160 Dichlorodifluoroethylene
flammable, n.o.s.	9026 153 Dinitrocyclohexylphenol
3313 135 Organic pigments, self-heating	9035 123 Gas identification set
3314 171 Plastic moulding compound	9037 151 Hexachloroethane
3315 151 Chemical sample, poisonous liquid	9069 132 Tetramethylmethylenediamine
3315 151 Chemical sample, poisonous	9073 113 Trinitroaniline, wetted
solid	9077 153 Adipic acid 9078 171 Aluminum sulfate solid
3315 151 Chemical sample, toxic liquid	and the state of t
3315 151 Chemical sample, toxic solid	9078 171 Aluminum sulphate, solid 9079 171 Ammonium acetate
3316 171 Chemical kit	9080 171 Ammonium acetate
3316 171 First aid kit	9081 171 Ammonium bicarbonate
3317 113 2-Amino-4,6-dinitrophenol,	9083 <b>154</b> Ammonium carbamate
wetted with not less than 20% water	9084 154 Ammonium carbonate
	9085 171 Ammonium chloride
Page 88	

ID No.	Guid No.		ID No.	Guid No.	
9086	143	Ammonium chromate	9120	171	Ferric fluoride
9087	171	Ammonium citrate, dibasic	9121	171	Ferric sulfate
9088	154	Ammonium fluoborate	9121	171	Ferric sulphate
9089	171	Ammonium sulfamate	9122	171	Ferrous ammonium sulfate
9089	171	Ammonium sulphamate	9122	171	Ferrous ammonium sulphate
9090	171	Ammonium sulfite	9125	171	Ferrous sulfate
9090	171	Ammonium sulphite	9125	171	Ferrous sulphate
9091	171	Ammonium tartrate	9126	171	Fumaric acid
9094	153	Benzoic acid	9127	171	Isopropanolamine
9095	171	n-Butyl phthalate			dodecylbenzenesulfonate
9096		Calcium chromate	9127	171	Isopropanolamine dodecylbenzenesulphonate
9097	171	Calcium dodecylbenzenesulfonate	9134	171	Lithium chromate
9097	171	Calcium	9137	171	Naphthenic acid
		dodecylbenzenesulphonate	9138	171	Nickel ammonium sulfate
9100	171	Chromic sulfate	9138	171	Nickel ammonium sulphate
9100	171	Chromic sulphate	9139	171	Nickel chloride
9101	171	Chromic acetate	9140	154	Nickel hydroxide
9102	171	Chromous chloride	9141	154	Nickel sulfate ·
9103	171	Cobaltous bromide	9141	154	Nickel sulphate
9104	171	Cobaltous formate	9142	171	Potassium chromate
9105	171	Cobaltous sulfamate	9145	171	Sodium chromate
9105	171	Cobaltous sulphamate	9146	171	Sodium
9106	171	Cupric acetate			dodecylbenzenesulfonate (branched chain)
9109	171	Cupric sulfate	9146	171	Sodium
9109	171	Cupric sulphate	3140	-	dodecylbenzenesulphonate
9110	171	Cupric sulfate, ammoniated			(branched chain)
9110	171	Cupric sulphate, ammoniated	9147	171	Sodium phosphate, dibasic
9111	171	Cupric tartrate	9148	171	Sodium phosphate, tribasic
9117	171	EDTA	9149	171	Strontium chromate
9117	171	Ethylenediaminetetraacetic acid	9151	171	Triethanolamine
9118	171	Ferric ammonium citrate	0.45	4-4	dodecylbenzenesulfonate
9119	171	Ferric ammonium oxalate	9151	171	Triethanolamine dodecylbenzenesulphonate
-					Page 80

ID Gui No. No		ID No.	Gui No.	
9153 171	Zinc acetate	9199	142	Oxidizer, poisonous, liquid,
9154 171	Zinc ammonium chloride	0000		n.o.s.
9155 171	Zinc borate	9200	141	Oxidizer, poisonous, solid, n.o.s.
9156 171	Zinc bromide	9201	171	Antimony trioxide
9157 171	Zinc carbonate	9202	168	Carbon monoxide, refrigerated
9158 151	Zinc fluoride			liquid (cryogenic liquid)
9159 171	Zinc formate	9206	137	Methyl phosphonic dichloride
9160 171	Zinc phenolsulfonate	9259	128	Elevated temperature material,
9160 171	Zinc phenolsulphonate			liquid, n.o.s., (at or above 100°C (212°F) and below its
9161 171	Zinc sulfate			flash point)
9161 171	Zinc sulphate	9260	169	Aluminum, molten
9162 171	Zirconium potassium fluoride	9263	156	Chloropivaloyl chloride
9163 171	Zirconium sulfate	9264	151	3,5-Dichloro-2,4,6-
9163 171	Zirconium sulphate			trifluoropyridine
9180 162	Uranyl acetate	9269	132	Trimethoxysilane
9183 146	Organic peroxide, liquid, n.o.s.	9274	160	1,1-Dichloro-1-fluoroethane
9183 <b>146</b>	Organic peroxide, solution,	9275	158	Regulated medical waste
0407 446	n.o.s.	9276	128	Flammable liquids, elevated
9187 146	Organic peroxide, solid, n.o.s.			temperature material, n.o.s.
9188 171	Hazardous substance, liquid, n.o.s.	9277	171	Oil, n.o.s., flash point not less than 93°C (200°F)
9188 171	Hazardous substance, solid,	9278	171	Genetically modified organisms
0400 474	n.o.s.	9301	153	Waste Type 1
9188 171	ORM-E, liquid, n.o.s.	9302	153	Waste Type 2
9188 171	ORM-E, solid, n.o.s.	9303	131	Waste Type 3
9189 171	Hazardous waste, liquid, n.o.s.	9304	153	Waste Type 4
9189 171	Hazardous waste, solid, n.o.s.	9305	131	Waste Type 5
9190 143	Ammonium permanganate	9306	154	Waste Type 6
9191 143	and an analysis of the state of	9307	154	Waste Type 7
9192 167	Fluorine, refrigerated liquid (cryogenic liquid)	9308	153	Waste Type 8
9193 140	Oxidizer, corrosive, liquid, n.o.s.	9309	153	Waste Type 9
9194 140	Oxidizer, corrosive, solid, n.o.s.	9310	153	Waste Type 10
9195 135	Metal alkyl, solution, n.o.s.	9311	153	Waste Type 11
Page 00				

	ID No.	Gui No.		ID No.	Gui		Name of Mo	aterial
7	9312	153	Waste Type 12	9345	132	Was	te Type 45	
	9313	153	Waste Type 13	9346	153	Was	te Type 46	
ı	9314	153	Waste Type 14	9347	132	Was	te Type 47	
ı	9315	153	Waste Type 15	9348	153	Was	te Type 48	
	9316	154	Waste Type 16	9349	153	Was	te Type 49	
ı	9317	154	Waste Type 17	9350	153	Was	te Type 50	
	9318	154	Waste Type 18	9351	153	Was	te Type 51	
	9319	154	Waste Type 19	9352	153	Was	te Type 52	
	9320	154	Waste Type 20	9353	153	Was	te Type 53	
H	9321	154	Waste Type 21	9354	153	Was	te Type 54	
	9322	154	Waste Type 22	9355	153	Was	te Type 55	
	9323	154	Waste Type 23	9356	153	Was	te Type 56	
	9324	152	Waste Type 24	9357	153	Was	te Type 57	
	9325	127	Waste Type 25	9358	153	Was	te Type 58	
	9326	152	Waste Type 26	9359	151	Was	te Type 59	
	9327	131	Waste Type 27	9360	132	Was	te Type 60	
į	9328	131	Waste Type 28	9361	151	Was	te Type 61	
ı	9329	153	Waste Type 29	9362	151	Was	te Type 62	
ı	9330	153	Waste Type 30	9363	151	Was	te Type 63	
ı	9331	129	Waste Type 31	9364	151	Was	te Type 64	
l	9332	129	Waste Type 32	9365	151	Was	te Type 65	
ļ	9333	129	Waste Type 33	9366	151	Was	te Type 66	
ļ	9334	129	Waste Type 34	9367	152	Was	te Type 67	
ì	9335	153	Waste Type 35	9368	154	Was	te Type 68	
l	9336	153	Waste Type 36	9369	151	Was	te Type 69	
į	9337	153	Waste Type 37	9370	151	Was	te Type 70	
	9338	153	Waste Type 38	9371	133	Was	te Type 71	
į	9339	153	Waste Type 39				te Type 72	
Ì	9340	153	Waste Type 40				te Type 73	
Ì	9341		Waste Type 41				te Type 74	
	9342		Waste Type 42				te Type 75	
	9343		Waste Type 43				te Type 76	
	9344	132	Waste Type 44	9377	131	Was	te Type 77	
ĺ								Page 91

4 B4 ma a simi

No.	Guide No.	Name of Material	No. No.	Name of Material
9378	153 Wa	aste Type 78		
9379	153 Wa	aste Type 79		
9380	151 Wa	aste Type 80		
9381	154 Wa	aste Type 81		
9382	154 Wa	aste Type 82		
9383	154 Wa	iste Type 83		
9384	151 Wa	iste Type 84	The second second	
9385	154 Wa	iste Type 85	1 2 2 BA FA	
9386	154 Wa	iste Type 86		
9387	154 Wa	ste Type 87		
9388		ste Type 88		
9389		ste Type 89		
9390		ste Type 90		
9391		ste Type 91		
9392		ste Type 92		
9393		ste Type 93		
9394		ste Type 94		
9395		ste Type 95		
9396		ste Type 96		
9397		ste Type 97		
9399		ste Type 99		
9400		ste Type 100		
9500	151 Lea	achable toxic waste		
			18818	

Name of Material (	Guide No.		Name of Material (	euide No.	
Accumulators, pressurized,	126	1956	Acetylene tetrabromide	159	2504
pneumatic or hydraulic			Acetyl iodide	156	1898
Acetal	127	1088	Acetyl methyl carbinol	127	2621
Acetaldehyde	129	1089	Acetyl peroxide	148	2084
Acetaldehyde ammonia	171	1841	Acid, liquid, n.o.s.	154	1760
Acetaldehyde oxime	129	2332	Acid, sludge	153	1906
Acetic acid, glacial	132	2789	Acid butyl phosphate	153	1718
Acetic acid, solution, more than 10% but not more than 80%	153	2790	Acridine	153	2713
acid		link i	Acrolein, inhibited	131P	1092
Acetic acid, solution, more than	132	2789	Acrolein dimer, stabilized	129P	2607
80% acid	407	4745	Acrylamide	153P	2074
Acetic anhydride	137	1715	Acrylic acid, inhibited	132P	2218
Acetone	127	1090	Acrylonitrile, inhibited	131P	1093
Acetone cyanohydrin, stabilized		1541	Adhesives (flammable)	127	1133
Acetone oils	127	1091	Adipic acid	153	9077
Acetonitrile	131	1648	Adiponitrile	153	2205
Acetyl acetone peroxide	145	2080	Aerosol dispensers	126	1950
Acetyl benzoyl peroxide	147	2081	Aerosols	126	1950
Acetyl bromide	156	1716	Air, compressed	122	1002
Acetyl chloride	132	1717	Air, refrigerated liquid	122	1003
Acetyl cyclohexanesulfonyl peroxide	148	2082	(cryogenic liquid)	400	4000
Acetyl cyclohexanesulfonyl peroxide	148	2083	Air, refrigerated liquid (cryogenic liquid), non- pressurized	122	1003
Acetyl cyclohexanesulphonyl peroxide	148	2082	Air bag inflators	133	1325
Acetyl cyclohexanesulphonyl	148	2083	Air bag inflators	171	3268
peroxide	140	2000	Air bag modules	133	1325
Acetylene	116	1001	Air bag modules	171	3268
Acetylene, dissolved	116	1001	Aircraft evacuation slides	171	2990
Acetylene, Ethylene and Propylene in mixture,	116	3138	Aircraft hydraulic power unit fuel tank	131	3165
refrigerated liquid containing at least 71.5% Ethylene with			Aircraft survival kits	171	3072
not more than 22.5% Acetylene and not more than 6% Propylene.			Alcoholates solution, n.o.s., in alcohol	127	3274
Property of the Control of the Contr	4 . 3	- No. 10	The second secon	P	age 93

	Name of Material	Guide No.		Name of Material (	Suide No.	No.
1	Alcoholic beverages	127	3065	Alkaloids, solid, n.o.s.	151	1544
	Alcohols, flammable, poisonous	, 131	1986	(poisonous)	1.7	
	n.o.s.			Alkaloid salts, liquid, n.o.s. (poisonous)	151	3140
	Alcohols, flammable, toxic,	131	1986	Alkaloid salts, solid, n.o.s.	151	1544
	n.o.s.	127	1987	(poisonous)	101	1044
	Alcohols, n.o.s.	131	1986	Alkylamines, n.o.s.	132	2733
	Alcohols, poisonous, n.o.s.	131	1986	Alkylamines, n.o.s.	132	2734
	Alcohols, toxic, n.o.s. Aldehydes, flammable,	131	1988	Alkylamines, n.o.s.	153	2735
١	poisonous, n.o.s.	131	1900	Alkyl phenols, liquid, n.o.s.	153	3145
	Aldehydes, flammable, toxic, n.o.s.	131	1988	(including C2-C12 homologues)		
	Aldehydes, n.o.s.	129	1989	Alkyl phenols, solid, n.o.s.	153	2430
ı	Aldehydes, poisonous, n.o.s.	131	1988	(including C2-C12 homologues)		
i	Aldehydes, toxic, n.o.s.	131	1988	Alkyl sulfonic acids, liquid, with	153	2584
	Aldol	153	2839	more than 5% free Sulfuric	-11	
	Aldrin, liquid	131	2762	acid		
į	Aldrin, solid	151	2761	Alkyl sulfonic acids, liquid, with not more than 5% free Sulfurio	153	2586
Î	Aldrin mixture, dry	151	2761	acid		
1	Aldrin mixture, liquid	131	2762	Alkyl sulfonic acids, solid, with	153	2583
	Alkali metal alcoholates, self- heating, corrosive, n.o.s.	136	3206	more than 5% free Sulfuric acid		
١	Alkali metal alloy, liquid, n.o.s.	138	1421	Alkyl sulfonic acids, solid, with	153	2585
ı	Alkali metal amalgam	138	1389	not more than 5% free Sulfurion		
ı	Alkali metal amides	139	1390	Alkylsulfuric acids	156	2571
	Alkali metal dispersion	138	1391	Alkyl sulphonic acids, liquid,	153	2584
	Alkaline earth metal alcoholates, n.o.s.	135	3205	with more than 5% free Sulphuric acid		2001
ı	Alkaline earth metal alloy, n.o.s	. 138	1393	Alkyl sulphonic acids, liquid,	153	2586
	Alkaline earth metal amalgam	138	1392	with not more than 5% free Sulphuric acid		
	Alkaline earth metal dispersion	138	1391		152	2502
	Alkaline liquid, n.o.s.	154	1719	Alkyl sulphonic acids, solid, with more than 5% free Sulphuric	1 153	2583
	Alkaloids, liquid, n.o.s. (poisonous)	151	3140	acid		
				The second secon		

Name of Material G	No.		Name of Material G	No.	No.
Alkyl sulphonic acids, solid, with	153	2585	Aluminum nitrate	140	1438
not more than 5% free Sulphuric acid			Aluminum phosphate, solution	154	1760
Alkylsulphuric acids	156	2571	Aluminum phosphide	139	1397
Allethrin	151	2902	Aluminum phosphide pesticide	157	3048
Allyl acetate	131	2333	Aluminum powder, coated	170	1309
Allyl alcohol	131	1098	Aluminum powder, pyrophoric	135	1383
Allylamine	131	2334	Aluminum powder, uncoated	138	1396
Allyl bromide	131	1099	Aluminum processing	138	3170
Allyl chloride	131	1100	by-products  Aluminum remelting by-products	120	3170
Allyl chlorocarbonate	155	1722	Aluminum resinate	133	2715
Allyl chloroformate	155	1722			1398
Allyl ethyl ether	131	2335	Aluminum silicon powder, uncoated	138	1390
Allyl formate	131	2336	Aluminum smelting by-products	138	3170
Allyl glycidyl ether	129	2219	Aluminum sulfate, solid	171	9078
Allyl iodide	132	1723	Aluminum sulfate, solution	154	1760
Allyl isothiocyanate, inhibited	155	1545	Aluminum sulphate, solid	171	9078
Allyl isothiocyanate, stabilized	155	1545	Aluminum sulphate, solution	154	1760
Allyltrichlorosilane, stabilized	155	1724	Amines, flammable, corrosive,	132	2733
Aluminum, molten	169	9260	n.o.s.		
Aluminum alkyl halides	135	3052	Amines, liquid, corrosive, flammable, n.o.s.	132	2734
Aluminum alkyl hydrides	138	3076	Amines, liquid, corrosive, n.o.s.	153	2735
Aluminum alkyls	135	3051	Amines, solid, corrosive, n.o.s.	154	3259
Aluminum borohydride	135	2870	2-Amino-4-chlorophenol	151	2673
Aluminum borohydride in	135	2870	2-Amino-5-diethylaminopentane	153	2946
devices	427	1705	2-Amino-4,6-dinitrophenol,	113	3317
Aluminum bromide, anhydrous Aluminum bromide, solution	137	1725 2580	wetted with not less than 20%		
			water		4700
Aluminum carbide	138	1394	2-(2-Aminoethoxy)ethanol	154	1760
Aluminum chloride, anhydrous	137	1726	2-(2-Aminoethoxy)ethanol	153	3055
Aluminum chloride, solution	154	2581	N-Aminoethylpiperazine	153	2815
Aluminum dross	138	3170	Aminophenols	152	2512
Aluminum ferrosilicon powder	139	1395	Aminopropyldiethanolamine	154	1760
Aluminum hydride	138	2463		D	age 95

Name of Material	Guide		Name of Material	uide	
	No.	No.		No.	No.
N-Aminopropylmorpholine	154	1760	Ammonium hydrogendifluoride,	154	1727
Aminopyridines	153	2671	solid	454	0047
Ammonia, anhydrous	125	1005	Ammonium hydrogendifluoride, solution	154	2817
Ammonia, anhydrous, liquefied	125	1005	Ammonium hydrogen fluoride,	154	1727
Ammonia, solution, with more	154	2672	solid		
than 10% but not more than 35% Ammonia			Ammonium hydrogen fluoride,	154	2817
Ammonia, solution, with more	125	2073	solution		
than 35% but not more than	120	2070	Ammonium hydrogen sulfate	154	2506
50% Ammonia			Ammonium hydrogen sulphate	154	2506
Ammonia solution, with more	125	1005	Ammonium hydrosulfide,	132	2683
than 50% Ammonia	125	2240	solution Ammonium hydroculphide	132	2683
Ammonia solution, with more than 50% Ammonia	125	3318	Ammonium hydrosulphide, solution	132	2003
Ammonium acetate	171	9079	Ammonium hydroxide	154	2672
Ammonium arsenate	151	1546	Ammonium hydroxide, with more	154	2672
Ammonium benzoate	171	9080	than 10% but not more than		
Ammonium bicarbonate	171	9081	35% Ammonia	454	0056
Ammonium bifluoride, solid	154	1727	Ammonium metavanadate	154	2859
Ammonium bifluoride, solution	154	2817	Ammonium nitrate, liquid (hot concentrated solution)	140	2426
Ammonium bisulfite, solid	154	2693	Ammonium nitrate, with not more	140	1942
Ammonium bisulfite, solution	154	2693	than 0.2% combustible		
Ammonium bisulphite, solid	154	2693	substances		
Ammonium bisulphite, solution	154	2693	Ammonium nitrate, with organic coating	140	1942
Ammonium carbamate	154	9083	Ammonium nitrate fertilizer,	140	2072
Ammonium carbonate	154	9084	n.o.s.	140	2012
Ammonium chloride	171	9085	Ammonium nitrate fertilizer, with	140	2071
Ammonium chromate	143	9086	not more than 0.4%		
Ammonium citrate, dibasic	171	9087	combustible material		2005
Ammonium dichromate	141	1439	Ammonium nitrate fertilizers	140	2067
Ammonium dinitro-o-cresolate	141	1843	Ammonium nitrate fertilizers	140	2071
Ammonium fluoborate	154	9088	Ammonium nitrate fertilizers	140	2072
Ammonium fluoride	154	2505	Ammonium nitrate fertilizers, with Ammonium sulfate	140	2069
Ammonium fluorosilicate	151	2854	Ammonium nitrate fertilizers,	140	2069
			with Ammonium sulphate	140	2009
Page 96			CONTRACTOR OF THE PARTY OF THE	XX .	1111

). N	Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
27	Ammonium nitrate fertilizers,	140	2068	Amyl acetates	129	1104
7	with Calcium carbonate	440	0070	Amyl acid phosphate	153	2819
1	Ammonium nitrate fertilizers, with Phosphate or Potash	143	2070	Amyl alcohols	129	1105
1	Ammonium nitrate-fuel oil	112		Amylamines	132	1106
ı	mixtures			Amyl butyrates	130	2620
7	Ammonium nitrate mixed	140	2069	Amyl chloride	129	1107
1	fertilizers	-		n-Amylene	127	1108
	Ammonium oxalate	154	2449	Amyl formates	129	1109
	Ammonium perchlorate	143	1442	Amyl mercaptan	130	1111
	Ammonium permanganate	143	9190	n-Amyl methyl ketone	127	1110
ì	Ammonium persulfate	140	1444	Amyl methyl ketone	127	1110
Į	Ammonium persulphate	140	1444	Amyl nitrate	140	1112
l	Ammonium picrate, wetted with not less than 10% water	113	1310	Amyl nitrite	129	1113
ŀ	Ammonium polysulfide, solution	154	2818	tert-Amyl peroxy-2- ethylhexanoate	148	2898
ŀ	Ammonium polysulphide, solution	154	2818	tert-Amyl peroxyneodecanoate	148	2891
l	Ammonium polyvanadate	151	2861	Amyltrichlorosilane	155	1728
l	Ammonium silicofluoride	151	2854	Anhydrous ammonia	125	1005
l	Ammonium sulfamate	171	9089	Anhydrous ammonia, liquefied	- 125	1005
	Ammonium sulfate nitrate	140	1477	Aniline	153	1547
	Ammonium sulfide, solution	132	2683	Aniline hydrochloride	153	1548
	Ammonium sulfite	171	9090	Anisidines	153	2431
	Ammonium sulphamate	171	9089	Anisidines, liquid	153	2431
	Ammonium sulphate nitrate	140	1477	Anisidines, solid	153	2431
	Ammonium sulphide, solution	132	2683	Anisole	127	2222
	Ammonium sulphite	171	9090	Anisoyl chloride	156	1729
	Ammonium tartrate	171	9091	Antimony compound, inorganic,	157	3141
	Ammunition, poisonous,	151	2016	liquid, n.o.s.	157	1549
	non-explosive	131	2010	Antimony compound, inorganic, n.o.s.	137	1549
	Ammunition, tear-producing, non-explosive	159	2017	Antimony compound, inorganic, solid, n.o.s.	157	1549
	Ammunition, toxic,	151	2016	Antimony lactate	151	1550
	non-explosive		10	Antimony pentachloride, liquid	157	1730
F	WINDS AND RESTRICTIONS	of the latest	100 L	THE RESERVE OF THE PERSON NAMED IN	P	age 97

	Name of Material	Guide No.	No.	Name of Material G	uide No.	
	Antimony pentachloride, solution	157	1731	Arsenical pesticide, liquid, toxic, flammable	131	2993
	Antimony pentafluoride	157	1732	Arsenical pesticide, solid,	151	2759
	Antimony potassium tartrate	151	1551	poisonous		
	Antimony powder	170	2871	Arsenical pesticide, solid, toxic	151	2759
	Antimony sulfide, solid	133	1325	Arsenic bromide	151	1555
	Antimony sulphide, solid	133	1325	Arsenic chloride	157	1560
	Antimony tribromide, solid	157	1549	Arsenic compound, liquid, n.o.s.		1556
	Antimony tribromide, solution	157	1549	Arsenic compound, liquid, n.o.s., inorganic	152	1556
	Antimony trichloride	157	1733	Arsenic compound, solid, n.o.s.	152	1557
	Antimony trichloride, liquid	157	1733	Arsenic compound, solid, n.o.s.,	152	1557
	Antimony trichloride, solid	157	1733	inorganic		
	Antimony trichloride, solution	157	1733	Arsenic iodide, solid	152	1557
	Antimony trifluoride, solid	157	1549	Arsenic pentoxide	151	1559
	Antimony trifluoride, solution	157	1549	Arsenic sulfide	152	1557
	Antimony trioxide	171	9201	Arsenic sulphide	152	1557
	Aqua regia	157	1798	Arsenic trichloride	157	1560
	Argon	121	1006	Arsenic trioxide	151	1561
	Argon, compressed	121	1006	Arsenic trisulfide	152	1557
	Argon, refrigerated liquid (cryogenic liquid)	120	1951	Arsenic trisulphide	152	1557
	Arsenic	152	1558	Arsine	119	2188
	Arsenic acid, liquid	154	1553	Articles containing Polychlorinated biphenyls	171	2315
	Arsenic acid, solid	154	1554	(PCB)		
	Arsenical dust	152	1562	Articles, pressurized, hydraulic	126	3164
	Arsenical pesticide, liquid, flammable, poisonous	131	2760	(containing non-flammable gas)		
	Arsenical pesticide, liquid, flammable, toxic	131	2760	Articles, pressurized, pneumatic (containing non-flammable	126	3164
	Arsenical pesticide, liquid, poisonous	151	2994	gas) Aryl sulfonic acids, liquid, with more than 5% free Sulfuric	153	2584
	Arsenical pesticide, liquid, poisonous, flammable	131	2993	acid	450	2500
	Arsenical pesticide, liquid, toxid	c <b>151</b>	2994	Aryl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	153	2586
ľ	Page 98	-	STATE OF TAXABLE PARTY.	THE RESERVE OF THE PERSON NAMED IN	_	_

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Aryl sulfonic acids, solid, with	153	2583	Barium	138	1400
more than 5% free Sulfuric			Barium alloys, pyrophoric	135	1854
Aryl sulfonic acids, solid, with not more than 5% free Sulfurion	153	2585	Barium azide, wetted with not less than 50% water	113	1571
acid			Barium bromate	141	2719
Aryl sulphonic acids, liquid, with	153	2584	Barium chlorate	141	1445
more than 5% free Sulphuric			Barium chlorate, wet	141	1445
acid	450	0500	Barium compound, n.o.s.	154	1564
Aryl sulphonic acids, liquid, with not more than 5% free	153	2586	Barium cyanide	157	1565
Sulphuric acid  Aryl sulphonic acids, solid, with	153	2583	Barium hypochlorite, with more than 22% available Chlorine	141	2741
more than 5% free Sulphuric	100	2000	Barium nitrate	141	1446
acid		ă.	Barium oxide	157	1884
Aryl sulphonic acids, solid, with	153	2585	Barium perchlorate	141	1447
not more than 5% free Sulphuric acid			Barium permanganate	141	1448
Asbestos	171	2212	Barium peroxide	141	1449
Asbestos, blue	171	2212	Barium selenate	151	2630
Asbestos, brown	171	2212	Barium selenite	151	2630
Asbestos, white	171	2590	Batteries, containing Sodium	138	3292
Asphalt	130	1999	Batteries, dry, containing Potassium hydroxide, solid	154	3028
Asphalt, cut back	130	1999	Batteries, wet, filled with acid	154	2794
Azinphos methyl	152	2783	Batteries, wet, filled with alkali	154	2795
1-Aziridinyl phosphine oxide (Tris)	152	2501	Batteries, wet, non-spillable	154	2800
Azodicarbonamide	149	3242	Battery	154	1813
2,2'-Azodi-(2,4-dimethyl-4-	150	2955	Battery	154	2794
methoxyvaleronitrile)			Battery	154	2795
2,2'-Azodi-(2,4-	150	2953	Battery fluid, acid	157	2796
dimethylvaleronitrile)	440	2054	Battery fluid, acid, with battery	157	2796
1,1'-Azodi- (hexahydrobenzonitrile)	149	2954	Battery fluid, acid, with electronic equipment or	157	2796
Azodiisobutyronitrile	150	2952	actuating device	art by	0707
2,2'-Azodi-(2-methyl- butyronitrile)	150	3030	Battery fluid, alkali	154	2797

Name of Material G	uide No.		Name of Material	Guide No.	
Battery fluid, alkali, with battery	154	2797	Benzoic derivative pesticide,	151	2769
Battery fluid, alkali, with	154	2797	solid, toxic	450	2004
electronic equipment or actuating device			Benzonitrile	152	2224
Battery-powered equipment (wet	154	3171	Benzoquinone	153	2587
battery)	154	3111	Benzotrichloride	156	2226
Battery-powered vehicle (wet	154	3171	Benzotrifluoride Benzoyl chloride	131	2338 1736
battery)			Benzoyl peroxide	146	2085
Benzaldehyde	129	1989	Benzoyl peroxide	146	2087
Benzaldehyde	129	1990		146	2088
Benzene	130	1114	Benzoyl peroxide	145	2089
Benzene-1,3-disulfohydrazide	149	2971	Benzoyl peroxide	145	2009
Benzene-1,3-disulphohydrazide	149	2971	Benzoyl peroxide		_
Benzene phosphorus dichloride	137	2798	Benzyl bromide	156	1737
Benzene phosphorus thiodichloride	137	2799	Benzyl chloride Benzyl chloroformate	156 137	1738 1739
Benzene sulfohydrazide	149	2970	Benzyldimethylamine	132	2619
Benzenesulfonyl chloride	156	2225	4-[Benzyl(ethyl)amino]-3-	149	3037
Benzene sulphohydrazide	149	2970	ethoxybenzenediazonium	143	3037
Benzenesulphonyl chloride	156	2225	zinc chloride		
Benzidine	153	1885	Benzylidene chloride	156	1886
Benzoic acid	153	9094	Benzyl iodide	156	2653
Benzoic derivative pesticide,	131	2770	4-[Benzyl(methyl)amino]-3-	150	3038
liquid, flammable, poisonous	101	2770	ethoxybenzenediazonium zinc chloride		
Benzoic derivative pesticide, liquid, flammable, toxic	131	2770	Beryllium chloride	154	1566
Benzoic derivative pesticide,	151	3004	Beryllium compound, n.o.s.	154	1566
liquid, poisonous			Beryllium fluoride	154	1566
Benzoic derivative pesticide,	131	3003	Beryllium nitrate	141	2464
liquid, poisonous, flammable			Beryllium powder	134	1567
Benzoic derivative pesticide, liquid, toxic	151	3004	Bhusa, wet, damp or contaminated with oil	133	1327
Benzoic derivative pesticide,	131	3003	Bicyclo[2.2.1]hepta-2,5-diene	127P	2251
liquid, toxic, flammable  Benzoic derivative pesticide,	151	2769	Bicyclo[2.2.1]hepta-2,5-diene, inhibited	127P	2251
solid, poisonous			Bifluorides, n.o.s.	154	1740
Page 100	DE DE		THE RESERVE OF THE PARTY OF THE	1000	-

	Name of Material	Guide No.		Name of Material	Guide No.	
69	(Bio)Medical waste, n.o.s.	158	3291	Boron trichloride	125	1741
	Bipyridilium pesticide, liquid,	131	2782	Boron trifluoride	125	1008
24	flammable, poisonous			Boron trifluoride, compressed	125	1008
16	Bipyridilium pesticide, liquid, flammable, toxic	131	2782	Boron trifluoride, dihydrate	157	2851
8	Bipyridilium pesticide, liquid, poisonous	151	3016	Boron trifluoride acetic acid complex	155	1742
0	Bipyridilium pesticide, liquid,	131	3015	Boron trifluoride diethyl etherat		2604
,	poisonous, flammable			Boron trifluoride dimethyl etherate	139	2965
3	Bipyridilium pesticide, liquid, toxic	151	3016	Boron trifluoride propionic acid complex	156	1743
	Bipyridilium pesticide, liquid, toxic, flammable	131	3015	Brake fluid, hydraulic	130	1118
-	Bipyridilium pesticide, solid, poisonous	151	2781	Bromates, inorganic, aqueous solution, n.o.s.	140	3213
Ī	Bipyridilium pesticide, solid,	151	2781	Bromates, inorganic, n.o.s.	141	1450
ı	toxic			Bromine	154	1744
I	Bisulfates, aqueous solution	154	2837	Bromine, solution	154	1744
ı	Bisulfites, aqueous solution,	154	2693	Bromine chloride	124	2901
ı	n.o.s.	454	2002	Bromine pentafluoride	144	1745
ı	Bisulfites, inorganic, aqueous solutions, n.o.s.	154	2693	Bromine trifluoride	144	1746
ı	Bisulphates, aqueous solution	154	2837	Bromoacetic acid	156	1938
ı	Bisulphites, aqueous solution,	154	2693	Bromoacetic acid, solid	156	1938
ı	n.o.s.			Bromoacetic acid, solution	156	1938
	Bisulphites, inorganic, aqueous	154	2693	Bromoacetone	131	1569
ĺ	solutions, n.o.s.	440		Bromoacetyl bromide	156	2513
	Blasting agent, n.o.s.	112		Bromobenzene	129	2514
	Bleaching powder	140	2208	Bromobenzyl cyanides	159	1694
	Blue asbestos	171	2212	1-Bromobutane	129	1126
	Bombs, smoke, non-explosive, with corrosive liquid, without	153	2028	2-Bromobutane	130	2339
	initiating device			Bromochlorodifluoromethane	126	1974
	Borate and Chlorate mixtures	140	1458	Bromochloromethane	160	1887
	Borneol	133	1312	1-Bromo-3-chloropropane	159	2688
	Boron tribromide	157	2692	2-Bromoethyl ethyl ether	130	2340
				Bromoform	159	2515
					Pac	ge 101

	Name of Material	Guide		Name of Material G	uide	
		No.	No.	KKULER KELET Z.	No.	
	1-Bromo-3-methylbutane	130	2341	tert-Butyl cumyl peroxide	145	2091
	Bromomethylpropanes	130	2342	tert-Butylcyclohexyl	156	2747
١	2-Bromo-2-nitropropane-1,3-dio	133	3241	chloroformate	440	24
	2-Bromopentane	130	2343	n-Butyl-4,4-di-(tert- butylperoxy)valerate	146	2140
1	2-Bromopropane	132	2344	n-Butyl-4,4-di-(tert-	145	2141
	Bromopropanes	132	2344	butylperoxy)valerate		
	3-Bromopropyne	132	2345	Butylene	115	1012
1	Bromotrifluoroethylene	116	2419	Butylene	115	1075
1	Bromotrifluoromethane	126	1009	1,2-Butylene oxide, stabilized	127P	3022
	Brown asbestos	171	2212	Butyl ethers	127	1149
	Brucine	152	1570	n-Butyl formate	129	1128
	Burnt cotton, not picked	133	1325	tert-Butyl hydroperoxide	147	2093
	Butadienes, inhibited	116P	1010	tert-Butyl hydroperoxide	147	2094
	Butane	115	1011	tert-Butyl hydroperoxide, not	147	2092
	Butane	115	1075	more than 80% in Di-tert-butyl		
	Butanedione	127	2346	peroxide and/or solvent	127	2255
	Butane mixture	115	1011	tert-Butyl hypochlorite	135	3255
	Butane mixture	115	1075	N,n-Butyl imidazole	152	2690
	Butanols	129	1120	n-Butyl isocyanate	155	2485
	Butoxyl	127	2708	tert-Butyl isocyanate	155	2484
	Butyl acetates	129	1123	tert-Butyl isopropyl benzene hydroperoxide	145	2091
	Butyl acid phosphate	153	1718	Butyl mercaptan	130	2347
	Butyl acrylate	129P	2348	n-Butyl methacrylate		2227
	Butyl acrylates, inhibited	129P	2348	n-Butyl methacrylate, inhibited		2227
	Butyl alcohol	129	1120	Butyl methyl ether	1297	2350
	n-Butylamine	132	1125	tert-Butyl monoperoxymaleate	146	2099
	N-Butylaniline	153	2738	Butyl nitrites	129	2351
	Butylbenzenes	128	2709	tert-Butyl peroxyacetate	146	2095
	n-Butyl bromide	129	1126	tert-Butyl peroxyacetate	146	2095
	Butyl chloride	130	1127	tert-Butyl peroxyacetate	146	2096
	n-Butyl chloroformate	155	2743	tert-Butyl peroxybenzoate		2097
	sec-Butyl chloroformate	155	2742		145	
	tert-Butyl cumene peroxide	145	2091	tert-Butyl peroxybenzoate	145	2890
١	Page 102					

Name of Material G	ouide No.		Name of Material	Guide No.	
tert-Butyl peroxycrotonate	145	2183	5-tert-Butyl-2,4,6-trinitro-	149	2956
Butyl peroxydicarbonate	148	2169	m-xylene		
Butyl peroxydicarbonate	148	2170	Butyl vinyl ether, inhibited	127P	2352
tert-Butyl peroxydiethylacetate	148	2144	1,4-Butynediol	153	2716
tert-Butyl peroxydiethylacetate,	145	2551	Butyraldehyde	129	1129
with tert-Butyl		pt-1	Butyraldoxime	129	2840
peroxybenzoate	440	04.40	Butyric acid	153	2820
tert-Butyl peroxy-2- ethylhexanoate	148	2143	Butyric anhydride	156	2739
tert-Butyl peroxy-2-	148	2888	Butyronitrile	131	2411
ethylhexanoate, not more than		2000	Butyryl chloride	132	2353
50%, with phlegmatizer		100	Cacodylic acid	151	1572
tert-Butyl peroxy-2-	148	2886	Cadmium compound	154	2570
ethylhexanoate, with 2,2-Di- (tert-butylperoxy)butane			Caesium	138	1407
tert-Butyl peroxy-2-	145	2887	Caesium hydroxide	157	2682
ethylhexanoate, with 2,2-Di-		200,	Caesium hydroxide, solution	154	2681
(tert-butylperoxy)butane			Caesium nitrate	140	1451
tert-Butyl peroxyisobutyrate	148	2142	Calcium	138	1401
tert-Butyl peroxyisobutyrate	148	2562	Calcium, metal and alloys,	135	1855
tert-Butyl peroxyisononanoate	145	2104	pyrophoric		-30
tert-Butyl peroxyisopropyl	146	2103	Calcium, pyrophoric	135	1855
carbonate	440	0477	Calcium alloys, pyrophoric	135	1855
tert-Butyl peroxyneodecanoate	148	2177	Calcium arsenate	151	1573
tert-Butyl peroxyneodecanoate	148	2594	Calcium arsenate and Calcium	151	1574
tert-Butyl peroxy-3- phenylphthalide	145	2596	arsenite mixture, solid  Calcium arsenite, solid	151	1574
tert-Butyl peroxypivalate	148	2110	Calcium arsenite and Calcium	151	1574
tert-Butyl peroxy-3,5,5-	145	2104	arsenate mixture, solid	131	1374
trimethylhexanoate		2101	Calcium carbide	138	1402
Butylphenols, liquid	153	2228	Calcium chlorate	140	1452
Butylphenols, solid	153	2229	Calcium chlorate, aqueous	140	2429
n-Butyl phthalate	171	9095	solution		
Butyl propionates	130	1914	Calcium chlorate, solution	140	2429
Butyltoluenes	131	2667	Calcium chlorite	140	1453
Butyltrichlorosilane	155	1747	Calcium chromate	171	9096
	100		AND DESCRIPTION OF THE PERSON	Pa	ae 103

Name of Material G	uide No.	D No.	Name of Material	Guide No.	
Calcium cyanamide, with more	138	1403	Calcium peroxide	140	1457
than 0.1% Calcium carbide			Calcium phosphide	139	1360
Calcium cyanide	157	1575	Calcium resinate	133	1313
Calcium dithionite	135	1923	Calcium resinate, fused	133	1314
Calcium	171	9097	Calcium selenate	151	2630
dodecylbenzenesulfonate	171	9097	Calcium silicide	138	1405
Calcium dodecylbenzenesulphonate	171	9091	Calcium silicon	138	1406
Calcium hydride	138	1404	Camphene	133	9011
Calcium hydrogen sulfite,	154	2693	Camphor	133	2717
solution			Camphor, synthetic	133	2717
Calcium hydrogen sulphite,	154	2693	Camphor oil	128	1130
solution			Caproic acid	153	2829
Calcium hydrosulfite	135	1923	Caprylyl peroxide	148	2129
Calcium hydrosulphite	135	1923	Caprylyl peroxide, solution	148	2129
Calcium hypochlorite, dry	140	1748	Carbamate pesticide, liquid,	131	2758
Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 10% water	140	2880	flammable, poisonous  Carbamate pesticide, liquid, flammable, toxic	131	2758
Calcium hypochlorite, hydrated mixture, with not less than 5.5% but not more than 10%	140	2880	Carbamate pesticide, liquid, poisonous	151	2992
water Calcium hypochlorite mixture,	140	2208	Carbamate pesticide, liquid, poisonous, flammable	131	2991
dry, with more than 10% but not more than 39% available	140	2200	Carbamate pesticide, liquid, toxic	151	2992
Chlorine Calcium hypochlorite mixture,	140	1748	Carbamate pesticide, liquid, toxic, flammable	131	2991
dry, with more than 39% available Chlorine (6.8% available Oxygen)			Carbamate pesticide, solid, poisonous	151	2757
Calcium manganese silicon	138	2844	Carbamate pesticide, solid, toxic	151	2757
Calcium metal, crystalline	138	1401	Carbaryl	151	2757
Calcium nitrate	140	1454	Carbofuran	151	2757
Calcium oxide	157	1910	Carbon, activated	133	1362
Calcium perchlorate	140	1455	Carbon, animal or vegetable	133	1361
Calcium permanganate	140	1456	origin		

Name of Material (	Suide No.	No.	Name of Material (	Suide No.	
Carbon bisulfide	131	1131	Carbon monoxide, refrigerated	168	9202
Carbon bisulphide	131	1131	liquid (cryogenic liquid)		
Carbon dioxide	120	1013	Carbon tetrabromide	151	2516
Carbon dioxide, compressed	120	1013	Carbon tetrachloride	151	1846
Carbon dioxide, refrigerated	120	2187	Carbonyl fluoride	125	2417
liquid			Carbonyl fluoride, compressed	125	2417
Carbon dioxide, solid	120	1845	Carbonyl sulfide	119	2204
Carbon dioxide and Ethylene	115	1041	Carbonyl sulphide	119	2204
oxide mixture, with more than 9% but not more than 87% Ethylene oxide			Cargo transport unit under fumigation	171	
Carbon dioxide and Ethylene oxide mixture, with more than	119	3300	Castor beans, meal, pomace or flake	171	2969
87% Ethylene oxide			Caustic alkali liquid, n.o.s.	154	1719
Carbon dioxide and Ethylene	115	1041	Caustic potash, dry, solid	154	1813
oxide mixtures, with more than 6% Ethylene oxide			Caustic potash, liquid	154	1814
Carbon dioxide and Ethylene	126	1952	Caustic potash, solution	154	1814
oxide mixtures, with not more	120	1902	Caustic soda, bead	154	1823
than 6% Ethylene oxide			Caustic soda, flake	154	1823
Carbon dioxide and Ethylene	126	1952	Caustic soda, granular	154	1823
oxide mixtures, with not more than 9% Ethylene oxide		net i	Caustic soda, solid	154	1823
Carbon dioxide and Nitrous	126	1015	Caustic soda, solution	154	1824
oxide mixture	120	1013	Cells, containing Sodium	138	3292
Carbon dioxide and Oxygen mixture	122	1014	Celluloid, in blocks, rods, rolls, sheets, tubes, etc., except scrap	133	2000
Carbon dioxide and Oxygen	122	1014	Celluloid, scrap	135	2002
mixture, compressed			Cement (flammable)	127	1133
Carbon disulfide	131	1131	Cement, container, linoleum, tile		1133
Carbon disulphide	131	1131	or wallboard, liquid	121	1100
Carbon monoxide	119	1016	Cement, leather	127	1133
Carbon monoxide, compressed	119	1016	Cement, liquid, n.o.s.	127	1133
Carbon monoxide and Hydrogen mixture	119	2600	Cement, pyroxylin	127	1133
Carbon monoxide and Hydrogen	119	2600	Cement, roofing, liquid	127	1133
mixture, compressed			Cement, rubber	127	1133

	Name of Material G	uide No.		Name of Material G	Suide No.	
	Cerium, slabs, ingots or rods	170	1333	Chemical sample, poisonous	151	3315
	Cerium, turnings of gritty powder	138	3078	solid	151	3315
	Cesium	138	1407	Chemical sample, toxic liquid		3315
1	Cesium hydroxide	157	2682	Chemical sample, toxic solid	151	
	Cesium hydroxide, solution	154	2681	Chloral, anhydrous, inhibited	153	2075
	Cesium nitrate	140	1451	Chlorate, n.o.s., wet	140	1461
	Charcoal	133	1361	Chlorate and Borate mixtures	140	1458
	Charcoal, briquettes	133	1361	Chlorate and Magnesium chloride mixture	140	1459
	Charcoal, shell	133	1361	Chlorates, inorganic, aqueous	140	3210
	Charcoal, wood, ground,	133	1361	solution, n.o.s.	170	52.
	crushed, granulated or pulverized			Chlorates, inorganic, n.o.s.	140	1461
	Charcoal screenings, made from	133	1361	Chloric acid	140	2626
	"Pinon" wood	100	100.	Chloric acid, aqueous solution,	140	2626
	Charcoal screenings, other than "Pinon" wood screenings	133	1361	with not more than 10% Chloric acid		
1	Chemical kit	154	1760	Chlorine	124	1017
	Chemical kit	171	3316	Chlorine dioxide, hydrate, frozer		9191
	Chemical kits (containing	154		Chlorine pentafluoride	124	2548
	corrosive substances)		13	Chlorine trifluoride	124	1749
	Chemical kits (containing flammable liquids)	128		Chlorite solution Chlorite solution, with more than	154	1908 1908
	Chemical kits (containing flammable solids)	133		5% available Chlorine		-
	Chemical kits (containing	140		Chlorites, inorganic, n.o.s.	143	1462
	oxidizing substances)	140		Chloroacetaldehyde	153	2232
	Chemical kits (containing	153		Chloroacetic acid, liquid	153	1750
	poisonous liquids)		X 1	Chloroacetic acid, molten	153	3250
	Chemical kits (containing	154		Chloroacetic acid, solid	153	1751
	poisonous solids)	150		Chloroacetic acid, solution	153	1750
	Chemical kits (containing toxic liquids)	153		Chloroacetone, stabilized	131	1695
	Chemical kits (containing toxic	154	113	Chloroacetonitrile	131	2668
	solids)			Chloroacetophenone	153	1697
	Chemical sample, poisonous	151	3315	Chloroacetophenone, liquid	153	1697
	liquid			Chloroacetophenone, solid	153	1697
	Page 106			THE RESERVE AND ADDRESS OF THE PARTY.		
	The state of the s					

0,	Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
15	Chloroacetyl chloride	156	1752	Chloroformates, toxic,	155	2742
15	Chloroanilines, liquid	152	2019	corrosive, flammable, n.o.s.		
	Chloroanilines, solid	152	2018	Chloroformates, toxic, corrosive, n.o.s.	154	3277
15	Chloroanisidines	152	2233		420	
	Chlorobenzene	130	1134	1-Chloroheptane 1-Chlorohexane	129 129	
18	Chlorobenzotrifluorides	130	2234	Chloromethyl chloroformate		2745
Ŋ	p-Chlorobenzoyl peroxide	146	2113		157	2745
9	p-Chlorobenzoyl peroxide	145	2114	Chloromethyl ethyl ether	131	2354
0	p-Chlorobenzoyl peroxide	145	2115	3-Chloro-4-methylphenyl isocyanate	156	2236
	Chlorobenzyl chlorides	153	2235	Chloronitroanilines	153	2237
1	1-Chloro-3-bromopropane	159	2688	Chloronitrobenzenes	152	1578
6	Chlorobutanes	130	1127	Chloronitrobenzenes, liquid	152	1578
6	Chlorocresols	152	2669	Chloronitrobenzenes, solid	152	1578
l	Chlorocresols, liquid	152	2669	Chloronitrotoluenes	152	2433
,	Chlorocresols, solid	152	2669	Chloronitrotoluenes, liquid	152	2433
	3-Chloro-4-diethylamino-	149	3033	Chloronitrotoluenes, solid	152	2433
3	benzenediazonium zinc chloride			Chloropentafluoroethane	126	1020
	Chlorodifluorobromomethane	126	1974	Chloropentafluoroethane and Chlorodifluoromethane	126	1973
3	1-Chloro-1,1-difluoroethane	115	2517	mixture	•	
3	Chlorodifluoroethanes	115	2517	3-Chloroperoxybenzoic acid	146	2755
ı	Chlorodifluoromethane	126	1018	Chlorophenates, liquid	154	2904
	Chlorodifluoromethane and	126	1973	Chlorophenates, solid	154	2905
	Chloropentafluoroethane mixture			Chlorophenolates, liquid	154	2904
ì	Chlorodinitrobenzenes	153	1577	Chlorophenolates, solid	154	2905
	1-Chloro-2,3-epoxypropane	131P	2023	Chlorophenols, liquid	153	2021
	2-Chloroethanal	153	2232	Chlorophenols, solid	153	2020
	Chloroform	151	1888	Chlorophenyltrichlorosilane	156	1753
	Chloroformates, n.o.s.	155	2742	Chloropicrin	154	1580
	Chloroformates, poisonous,	155	2742	Chloropicrin, absorbed	154	1583
	corrosive, flammable, n.o.s.			Chloropicrin and Methyl bromide mixture	123	1581
	Chloroformates, poisonous, corrosive, n.o.s.	154	3277	Chloropicrin and Methyl chloride mixture		1582 ge 107

Name of Material G	uide No.		Name of Material G	uide No.	
at the state of th	100	1955	Chlorotetrafluoroethane and	126	3297
Chloropicrin and non-flammable, non-liquefied compressed gas mixture	123	1955	Ethylene oxide mixture, with not more than 8.8% Ethylene	120	3231
Chloropicrin mixture, flammable	131	2929	oxide	420	0000
Chloropicrin mixture, n.o.s.	154	1583	Chlorotoluenes	130	2238
Chloropivaloyl chloride	156	9263	4-Chloro-o-toluidine hydrochloride	153	1579
Chloroplatinic acid, solid	154	2507	Chlorotoluidines	153	2239
Chloroprene, inhibited	131P	1991	Chlorotoluidines, liquid	153	2239
1-Chloropropane	129	1278	Chlorotoluidines, solid	153	2239
2-Chloropropane	129	2356	1-Chloro-2,2,2-trifluoroethane	126	1983
3-Chloropropanol-1	153	2849	Chlorotrifluoroethane	126	1983
2-Chloropropene	130P	2456	Chlorotrifluoromethane	126	1022
2-Chloropropionic acid	153	2511	Chlorotrifluoromethane and	126	2599
alpha-Chloropropionic acid	153	2511	Trifluoromethane azeotropic	120	2000
2-Chloropyridine	153	2822	mixture with approximately		
Chlorosilanes, corrosive, flammable, n.o.s.	155	2986	60% Chlorotrifluoromethane Chlorpyrifos	152	2783
Chlorosilanes, corrosive, n.o.s.	156	2987	Chromic acetate	171	9101
Chlorosilanes, flammable,	155	2985	Chromic acid, solid	141	1463
corrosive, n.o.s.			Chromic acid, solution	154	1755
Chlorosilanes, n.o.s.	155	2985	Chromic acid mixture, dry	141	1463
Chlorosilanes, n.o.s.	155	2986	Chromic fluoride, solid	154	1756
Chlorosilanes, n.o.s.	156	2987	Chromic fluoride, solution	154	1757
Chlorosilanes, n.o.s.	139	2988	Chromic sulfate	171	9100
Chlorosilanes, water-reactive,	139	2988	Chromic sulphate	171	9100
flammable, corrosive, n.o.s.	407	4754	Chromium nitrate	141	2720
Chlorosulfonic acid	137	1754	Chromium oxychloride	137	1758
Chlorosulfonic acid and Sulfur trioxide mixture	137	1754	Chromium trioxide, anhydrous	141	1463
Chlorosulphonic acid	137	1754	Chromosulfuric acid	154	2240
Chlorosulphonic acid and	137	1754	Chromosulphuric acid	154	2240
Sulphur trioxide mixture			Chromous chloride	171	9102
1-Chloro-1,2,2,2- tetrafluoroethane	126	1021	Cigarette lighter, with flammable gas	115	1057
Chlorotetrafluoroethane	126	1021			

Name of Material (	Puide No.	No.	Name of Material	Guide No.	No.
Cigarette lighter, with flammable liquid	127	1226	Compound, tree or weed killing, solid (oxidizer)	140	1479
Cigarettes, self-lighting	133	1867	Compound, vulcanizing, liquid (corrosive)	154	1760
Clinical waste, unspecified, n.o.s.	158	3291	Compound, vulcanizing, liquid	127	1142
Coal gas	119	1023	(flammable)		
Coal gas, compressed	119	1023	Compounds, cleaning, liquid (corrosive)	154	1760
Coal tar distillate	128	1137	Compounds, cleaning, liquid	128	1993
Coal tar distillates, flammable	128	1136	(flammable)	120	1990
Coal tar dye, liquid	154	2801	Compounds, polishing, liquid,	127	1142
Coating solution	127	1139	etc. (flammable)		
Cobalt naphthenates, powder	133	2001	Compressed gas, flammable, n.o.s.	115	1954
Cobaltous bromide	171	9103	Compressed gas, flammable,	119	1953
Cobaltous formate	171	9104	poisonous, n.o.s. (Inhalation	113	1900
Cobaltous sulfamate	171	9105	Hazard Zone A)		
Cobaltous sulphamate	171	9105	Compressed gas, flammable,	119	1953
Cobalt resinate, precipitated	133	1318	poisonous, n.o.s. (Inhalation Hazard Zone B)		
Cocculus	151	1584	Compressed gas, flammable,	119	1953
Collodion	127	2059	poisonous, n.o.s. (Inhalation		
Combustible liquid, n.o.s.	128	1993	Hazard Zone C)		1050
Compound, cleaning liquid (containing Hydrochloric (muriatic) acid)	157	1789	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compound, cleaning liquid (containing Hydrofluoric acid)	157	1790	Compressed gas, flammable, toxic, n.o.s. (Inhalation	119	1953
Compound, rust preventing (corrosive)	154	1760	Hazard Zone A)  Compressed gas, flammable,	119	1953
Compound, rust removing (corrosive)	154	1760	toxic, n.o.s. (Inhalation Hazard Zone B)		
Compound, tree or weed killing, liquid (corrosive)	154	1760	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compound, tree or weed killing, liquid (flammable)	128	1993	Compressed gas, flammable, toxic, n.o.s. (Inhalation	119	1953
Compound, tree or weed killing,	153	2810	Hazard Zone D)		AUG S
liquid (toxic)			Compressed gas, n.o.s.	126	1956
The second second second	_		Name and Address of the Owner, where the Owner, which is the Owner,	Da	ge 109

Name of Material	Guide No.	No.	Name of Material	Guide No.	-
Compressed gas, oxidizing, n.o.s.	122	3156	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, poisonous, corrosive, n.o.s.	123	3304	Compressed gas, poisonous,	119	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation	123	3304	flammable, n.o.s. (Inhalation Hazard Zone D)		1055
Hazard Zone A)	123	3304	Compressed gas, poisonous, n.o.s.	123	1955
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)		3304	Compressed gas, poisonous, n.o.s. (Inhalation Hazard	123	1955
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3304	Zone A)  Compressed gas, poisonous, n.o.s. (Inhalation Hazard	123	1955
Compressed gas, poisonous,	123	3304	Zone B)	400	1055
corrosive, n.o.s. (Inhalation Hazard Zone D)			Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	1955
Compressed gas, poisonous, flammable, corrosive, n.o.s.	119	3305	Compressed gas, poisonous, n.o.s. (Inhalation Hazard	123	1955
Compressed gas, poisonous, flammable, corrosive, n.o.s.	119	3305	Zone D)	101	0000
(Inhalation Hazard Zone A) Compressed gas, poisonous,	119	3305	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	124	3306
flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)		3303	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, poisonous,	119	3305	(Inhalation Hazard Zone A)	404	2200
flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)		2225	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3306
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3305	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, poisonous,	119	1953	(Inhalation Hazard Zone C)		
flammable, n.o.s.			Compressed gas, poisonous,	124	3306
Compressed gas, poisonous, flammable, n.o.s. (Inhalatio	<b>119</b>	1953	oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)		
Hazard Zone A)  Compressed gas, poisonous,	119	1953	Compressed gas, poisonous, oxidizing, n.o.s.	124	3303
flammable, n.o.s. (Inhalatio Hazard Zone B)		1000	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation	124	3303
Deline Jane			Hazard Zone A)		

Name of Material	Guide No.		Name of Material	Guide No.	
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, toxic, corrosive, n.o.s.	123	3304	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compressed gas, toxic, corrosive, n.o.s. (Inhalation	123	3304	Compressed gas, toxic, n.o.s.	123	1955
Hazard Zone A)			Compressed gas, toxic, n.o.s.	123	1955
Compressed gas, toxic,	123	3304	(Inhalation Hazard Zone A)		
corrosive, n.o.s. (Inhalation Hazard Zone B)			Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	1955
Hazard Zone D)			Compressed gas, toxic, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, toxic, flammable, corrosive, n.o.s.	119	3305	Compressed gas, toxic, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, toxic,	119	3305	(Inhalation Hazard Zone A)		
flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)			Compressed gas, toxic, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, toxic, flammable, corrosive, n.o.s.	119	3305	(Inhalation Hazard Zone B)		-
(Inhalation Hazard Zone B)			Compressed gas, toxic,	124	3306
Compressed gas, toxic,	119	3305	oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)		
flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)			Compressed gas, toxic, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, toxic,	119	3305	(Inhalation Hazard Zone D)		
flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)			Compressed gas, toxic,	124	3303
Compressed gas, toxic,	119	1953	oxidizing, n.o.s.		
flammable, n.o.s.					
					ao 111

Name of Material	Guide No.	No.	Name of Material G	No.	
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3303	Corrosive liquid, acidic, organic, n.o.s.	153	3265 3266
Compressed gas, toxic,	124	3303	Corrosive liquid, basic, inorganic, n.o.s.	134	3200
oxidizing, n.o.s. (Inhalation Hazard Zone B)			Corrosive liquid, basic, organic, n.o.s.	153	3267
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3303	Corrosive liquid, flammable, n.o.s.	132	2920
Compressed gas, toxic,	124	3303	Corrosive liquid, n.o.s.	154	1760
oxidizing, n.o.s. (Inhalation Hazard Zone D)		T	Corrosive liquid, oxidizing, n.o.s.	140	3093
Consumer commodity	171	8000	Corrosive liquid, poisonous,	154	2922
Copper acetoarsenite	151	1585	Corrosive liquid, self-heating,	136	3301
Copper arsenite	151	1586	n.o.s.		3301
Copper based pesticide, liquid flammable, poisonous	, 131	2776	Corrosive liquid, toxic, n.o.s.	154	2922
Copper based pesticide, liquid flammable, toxic	, 131	2776	Corrosive liquid, water-reactive, n.o.s.		3094
Copper based pesticide, liquid poisonous	, 151	3010	Corrosive liquid, which in contact with water emits flammable gases, n.o.s.	138	3094
Copper based pesticide, liquid poisonous, flammable	, 131	3009	Corrosive solid, acidic, inorganic, n.o.s.	154	3260
Copper based pesticide, liquid toxic	, 151	3010	Corrosive solid, acidic, organic, n.o.s.	154	3261
Copper based pesticide, liquid toxic, flammable	, 131	3009	Corrosive solid, basic, inorganic, n.o.s.	154	3262
Copper based pesticide, solid, poisonous	151	2775	Corrosive solid, basic, organic, n.o.s.	154	3263
Copper based pesticide, solid, toxic	151	2775	Corrosive solid, flammable,	134	2921
Copper chlorate	141	2721	Corrosive solid, n.o.s.	154	1759
Copper chloride	154	2802	Corrosive solid, oxidizing, n.o.s.		3084
Copper cyanide	151	1587	Corrosive solid, poisonous,	154	2923
Copra	135	1363	n.o.s.		
Corrosive liquid, acidic, inorganic, n.o.s.	154	3264	Corrosive solid, self-heating, n.o.s.	136	3095
I describe the second					

	Name of Material (	Suide No.	No.	Name of Material	Guide No.	No.
5	Corrosive solid, toxic, n.o.s.	154	2923	Crotonic acid, liquid	153	2823
	Corrosive solid, water-reactive,	138	3096	Crotonic acid, solid	153	2823
l	n.o.s.			Crotonylene	128	1144
	Corrosive solid, which in contact with water emits flammable	138	3096	Cumene	131	1918
	gases, n.o.s.			Cumene hydroperoxide	147	2116
	Cosmetics, liquid, n.o.s.	154	1760	Cupric acetate	171	9106
	Cosmetics, n.o.s.	133	1325	Cupric sulfate	171	9109
	Cosmetics, n.o.s.	140	1479	Cupric sulfate, ammoniated	171	9110
	Cosmetics, n.o.s.	128	1993	Cupric sulphate	171	9109
	Cosmetics, solid, n.o.s.	154	1759	Cupric sulphate, ammoniated	171	9110
	Cotton	133	1365	Cupric tartrate	171	9111
į	Cotton, wet	133	1365	Cupriethylenediamine, solution	154	1761
i	Cotton waste, oily	133	1364	Cyanide solution, n.o.s.	157	1935
	Coumaphos	152	2783	Cyanides, inorganic, n.o.s.	157	1588
l	Coumarin derivative pesticide, liquid, flammable, poisonous	131	3024	Cyanides, inorganic, solid, n.o.s.	157	1588
	Coumarin derivative pesticide,	131	3024	Cyanogen	119	1026
ŀ	liquid, flammable, toxic		-	Cyanogen, liquefied	119	1026
ł	Coumarin derivative pesticide, liquid, poisonous	151	3026	Cyanogen bromide	157	1889
	Coumarin derivative pesticide,	131	3025	Cyanogen chloride, inhibited	125	1589
	liquid, poisonous, flammable	131	3023	Cyanogen gas	119	1026
	Coumarin derivative pesticide,	151	3026	Cyanuric chloride	157	2670
	liquid, toxic			Cyclobutane	115	2601
	Coumarin derivative pesticide,	131	3025	Cyclobutyl chloroformate	155	2744
	liquid, toxic, flammable	454	0007	1,5,9-Cyclododecatriene	153	2518
	Coumarin derivative pesticide, solid, poisonous	151	3027	Cycloheptane	128	2241
	Coumarin derivative pesticide,	151	3027	Cycloheptatriene	131	2603
	solid, toxic		=	Cycloheptene	128	2242
	Cresols	153	2076	Cyclohexane	128	1145
	Cresylic acid	153	2022	Cyclohexanethiol	131	3054
	Crotonaldehyde, inhibited	131P	1143	Cyclohexanone	127	1915
	Crotonaldehyde, stabilized	131P	1143	Cyclohexanone peroxide, not more than 72% as a paste	147	2896
	Crotonic acid	153	2823	more than 12 % as a paste	47	

	Name of Material	Guide No.		Name of Material G	uide No.	
	Cyclohexanone peroxide, not more than 72% in solution	147	2118	Devices, small, hydrocarbon gas powered, with release device	115	3150
	Cyclohexanone peroxide, not	147	2119	Diacetone alcohol	129	1148
	more than 90%, with not less than 10% water			Diacetone alcohol peroxides	148	2163
	Cyclohexene	130	2256	Diacetyl	127	2346
	Cyclohexenyltrichlorosilane	156	1762	Diallylamine	132	2359
	Cyclohexyl acetate	130	2243	Diallyl ether	131P	2360
	Cyclohexylamine	132	2357	4,4'-Diaminodiphenylmethane	153	2651
J	Cyclohexyl isocyanate	155	2488	Di-n-amylamine	132	2841
	Cyclohexyl mercaptan	131	3054	Diazinon	152	2783
١	Cyclohexyltrichlorosilane	156	1763	2-Diazo-1-naphthol-4- sulfochloride	149	3042
	Cyclooctadiene phosphines	135	2940	2-Diazo-1-naphthol-4-	149	3042
ı	Cyclooctadienes	130P	2520	sulphochloride		
ı	Cyclooctatetraene	128P	2358	2-Diazo-1-naphthol-5-	149	3043
ı	Cyclopentane	128	1146	sulfochloride		20.40
١	Cyclopentanol	129	2244	2-Diazo-1-naphthol-5- sulphochloride	149	3043
١	Cyclopentanone	127	2245	Dibenzyldichlorosilane	156	2434
1	Cyclopentene	128	2246	Dibenzyl peroxydicarbonate	148	2149
١	Cyclopropane	115	1027	Diborane	119	1911
ı	Cyclopropane, liquefied	115	1027	Diborane, compressed	119	1911
1	Cymenes	130	2046	Diborane mixtures	119	1911
	Dangerous goods in apparatus	171	8001	Dibromobenzene	129	2711
١	Dangerous goods in machinery		8001	1,2-Dibromobutan-3-one	154	2648
1	DDT	151	2761	Dibromochloropropanes	159	2872
۱	Decaborane	134	1868	Dibromodifluoromethane	159	1941
ì	Decahydronaphthalene	130	1147	Dibromomethane	160	2664
	n-Decane	128	2247	Di-n-butylamine	132	2248
ı	Decanoyl peroxide	148	2120	Dibutylaminoethanol	153	2873
	Denatured alcohol	127	1987	Di-(4-tert-butylcyclohexyl)-	148	2154
	Denatured alcohol (toxic)	131	1986	peroxydicarbonate		
	Deuterium	115	1957	Di-(4-tert-butylcyclohexyl)-	148	2894
	Deuterium, compressed	115	1957	peroxydicarbonate		
	Page 114			Dibutyl ethers	127	1149
1	ay The same of the					

Name of Material G	No.		Name of Material (	∋uide No.	
Di-tert-butyl peroxide	145	2102	1,3-Dichloroacetone	153	2649
2,2-Di-(tert-butylperoxy)butane	146	2111	Dichloroacetyl chloride	156	1765
1,1-Di-(tert-butylperoxy)-	146	2179	Dichloroanilines	153	1590
cyclohexane	440	0.4.0.0	Dichloroanilines, liquid	153	1590
1,1-Di-(tert-butylperoxy)- cyclohexane	146	2180	Dichloroanilines, solid	153	1590
1,1-Di-(tert-butylperoxy)-	145	2885	m-Dichlorobenzene o-Dichlorobenzene	152 152	1591
cyclohexane	445	2007	p-Dichlorobenzene	152	1592
1,1-Di-(tert-butylperoxy)- cyclohexane	145	2897	2,4-Dichlorobenzoyl peroxide	146	2137
Di-(sec-butyl)peroxydicarbonate	148	2150	2,4-Dichlorobenzoyl peroxide	145	2138
Di-(sec-butyl)peroxydicarbonate	148	2151	2,4-Dichlorobenzoyl peroxide	145	2139
1,3-Di-(2-tert-butylperoxy-	145	2112	Dichlorobutene	132	2920
isopropyl)benzene and		-	Dichlorobutene	132	2924
1,4-Di-(2-tert-butylperoxy- isopropyl)benzene mixtures		100	2,2'-Dichlorodiethyl ether	152	1916
1,4-Di-(2-tert-butylperoxy-	145	2112	Dichlorodifluoroethylene	160	9018
isopropyl)benzene and			Dichlorodifluoromethane	126	1028
1,3-Di-(2-tert-butylperoxy- isopropyl)benzene mixtures			Dichlorodifluoromethane and	126	2602
Di-(tert-butylperoxy)phthalate	146	2106	Difluoroethane azeotropic mixture with approximately		200
Di-(tert-butylperoxy)phthalate	145	2107	74% Dichlorodifluoromethane		
Di-(tert-butylperoxy)phthalate	145	2108	Dichlorodifluoromethane and	126	3070
2,2-Di-(tert-butylperoxy)- propane	145	2883	Ethylene oxide mixture, with not more than 12.5% Ethylene		
2,2-Di-(tert-butylperoxy)-	145	2884	oxide	426	3070
propane		G P	Dichlorodifluoromethane and Ethylene oxide mixtures, with	126	3070
1,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	146	2145	not more than 12% Ethylene oxide		01
1,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	145	2146	Dichlorodimethyl ether, symmetrical	153	2249
1,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	145	2147	Dichlorodiphenyltrichloroethane (DDT)	151	2761
Dicetyl peroxydicarbonate	148	2164	1,1-Dichloroethane	130	2362
Dicetyl peroxydicarbonate, not	148	2895	1,2-Dichloroethylene	132P	1150
more than 42%, in water			Dichloroethylene	132P	1150
Dichloroacetic acid	153	1764	Dichloroethyl ether	152	1916
Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner	-	NAME OF TAXABLE PARTY.		Pa	ge 115

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	No.	la
1,1-Dichloro-1-fluoroethane	160	9274	Dieldrin	151	2761	Dieth
Dichlorofluoromethane	126	1029	Diesel fuel	128	1202	Office
Dichloroisocyanuric acid, dry	141	2465	Diesel fuel	128	1993	1,1-
Dichloroisocyanuric acid salts	141	2465	Diethoxymethane	127	2373	oific
Dichloroisopropyl ether	153	2490	2,5-Diethoxy-4-morpholino-	150	3036	Diffu
Dichloromethane	160	1593	benzenediazonium zinc chloride		70	0
1,1-Dichloro-1-nitroethane	153	2650	3,3-Diethoxypropene	127	2374	a
Dichloropentanes	130	1152	Diethylamine	132	1154	d
2,4-Dichlorophenoxyacetic acid	152	2765	2-Diethylaminoethanol	132	2686	1,1
Dichlorophenyl isocyanates	156	2250	Diethylaminoethanol	132	2686	Diff
Dichlorophenyltrichlorosilane	156	1766	3-Diethylaminopropylamine	132	2684	Dif
1,2-Dichloropropane	130	1279	Diethylaminopropylamine	132	2684	a
Dichloropropane	130	1279	N,N-Diethylaniline	153	2432	2.2
1,3-Dichloropropanol-2	153	2750	Diethylbenzene	130	2049	2.3 Di-
Dichloropropenes	132	2047	Diethyl carbonate	127	2366	UI-
2,2-Dichloropropionic acid	154	1760	Diethyldichlorosilane	155	1767	Dii
Dichlorosilane	119	2189	Diethylenetriamine	154	2079	Dii
1,2-Dichloro-1,1,2,2-	126	1958	Diethyl ether	127	1155	
tetrafluoroethane		1050	N,N-Diethylethylenediamine	132	2685	D
Dichlorotetrafluoroethane	126	1958	Di-(2-ethylhexyl)-	148	2122	Di
3,5-Dichloro-2,4,6- trifluoropyridine	151	9264	peroxydicarbonate	- 140	2122	Di
Dichlorvos	152	2783	Di-(2-ethylhexyl)- peroxydicarbonate	148	2123	Di
Dicumyl peroxide	145	2121	Di-(2-ethylhexyl)phosphoric	153	1902	D
Dicycloheptadiene	127P	2251	acid	133	1902	D
Dicyclohexylamine	153	2565	Diethyl ketone	127	1156	D
Dicyclohexylammonium nitrite	153	2687	p-Diethylnitrosoaniline	136		0
Dicyclohexyl peroxydicarbonat	e 148	2152	Diethyl peroxydicarbonate	148	2175	1
Dicyclohexyl peroxydicarbonat	e 148	2153	Diethyl sulfate	152	1594	1
Dicyclopentadiene	129	2048	Diethyl sulfide	129	2375	
2,2-Di-(4,4-di-tert-butyl-	145	2168	Diethyl sulphate	152	1594	0
peroxycyclohexyl)propane	400	2074	Diethyl sulphide	129	2375	1
1,2-Di-(dimethylamino)ethane	129	2372	Diethylthiophosphoryl chloride		2751	10
Didymium nitrate	140	1465				
Page 116						F

	Name of Material (	Guide No.	No. of the last	Name of Material G	uide No.	
1	Diethylzinc	135	1366	2-Dimethylaminoacetonitrile	131	2378
2	Difluorochloroethanes	115	2517	4-Dimethylamino-6-(2-dimethyl-	150	3039
3	1,1-Difluoroethane	115	1030	aminoethoxy)toluene-2- diazonium zinc chloride		
3	Difluoroethane	115	1030	2-Dimethylaminoethanol	132	2051
6	Difluoroethane and Dichlorodifluoromethane	126	2602	2-Dimethylaminoethyl acrylate	152	3302
	azeotropic mixture with approximately 74% dichlorodifluoromethane			Dimethylaminoethyl methacrylate	153P	2522
1	1,1-Difluoroethylene	116P	1959	N,N-Dimethylaniline	153	2253
1	Difluoromethane	115	3252	Di-(2-methylbenzoyl)peroxide	148	2593
l	Difluorophosphoric acid,	154	1768	2,3-Dimethylbutane	128	2457
	anhydrous			1,3-Dimethylbutylamine	132	2379
1	2,2-Dihydroperoxypropane	146	2178	Dimethylcarbamoyl chloride  Dimethyl carbonate	156 129	2262 1161
-	2,3-Dihydropyran	127	2376	Dimethyl chlorothiophosphate	156	2267
-	Di-(1-hydroxycyclohexyl)-	145	2148	Dimethylcyclohexanes	128	2263
I	peroxide	132	2361	Dimethylcyclohexylamine	132	2264
	Diisobutylamine  Diisobutylana isomeria	127	2050	2,5-Dimethyl-2,5-di-	146	2172
ı	Diisobutylene, isomeric compounds	121	2030	(benzoylperoxy)hexane		712
I	Diisobutyl ketone	127	1157	2,5-Dimethyl-2,5-di-	145	2173
l	Diisobutyryl peroxide	148	2182	(benzoylperoxy)hexane	445	0455
ı	Diisooctyl acid phosphate	153	1902	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexane	145	2155
١	Diisopropylamine	132	1158	2,5-Dimethyl-2,5-di-(tert-	145	2156
ı	Diisopropylbenzene	145	2171	butylperoxy)hexane		
ı	hydroperoxide Diisopropyl ether	127	1159	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexyne-3	146	2158
	Diisotridecyl peroxydicarbonate		2889	2,5-Dimethyl-2,5-di-(tert-	145	2159
	Diketene, inhibited	131P		butylperoxy)hexyne-3, with		
	1,1-Dimethoxyethane	127	2377	not more than 52% Peroxide in inert solid		
	1,2-Dimethoxyethane	127	2252	Dimethyldichlorosilane	155	1162
	Dimethylamine, anhydrous	118	1032	Dimethyldiethoxysilane	127	2380
	Dimethylamine, aqueous solution	129	1160	2,5-Dimethyl-2,5-di-(2-ethyl- hexanoylperoxy)hexane	148	2157
	Dimethylamine, solution	129	1160			

Name of Material G	uide No.	No.	Name of Material	Guide No.		No
2,5-Dimethyl-2,5-dihydroperoxy	146	2174	Dinitrogen tetroxide	124	1067	Dip
hexane, not more than 82% with water			Dinitrogen tetroxide, liquefied	124	1067	nie
Dimethyldioxanes	128	2707	Dinitrogen tetroxide and Nitric oxide mixture	124	1975	Dip
Dimethyl disulfide	130	2381	Dinitrophenol, solution	153	1599	Dip
Dimethyl disulphide	130	2381	Dinitrophenol, wetted with not	113	1320	4-0
Dimethylethanolamine	132	2051	less than 15% water			Di-
Dimethyl ether	115	1033	Dinitrophenolates, wetted with	113	1321	
N,N-Dimethylformamide	129	2265	not less than 15% water		4000	Di
Dimethylhexane dihydroperoxide, with 18% or	146	2174	Dinitroresorcinol, wetted with not less than 15% water	113	1322	Di Di
more water	131	1163	N,N'-Dinitroso-N,N'-dimethyl terephthalamide	149	2973	Di
1,1-Dimethylhydrazine	131	2382	N,N'-Dinitrosopentamethylene	149	2972	D
1,2-Dimethylhydrazine			tetramine			0
Dimethylhydrazine, symmetrical		2382	Dinitrotoluenes	152	2038	ľ
Dimethylhydrazine, unsymmetrical	131	1163	Dinitrotoluenes, liquid	152	2038	D
Dimethyl	156	2267	Dinitrotoluenes, molten	152	1600	0
phosphorochloridothioate			Dinitrotoluenes, solid	152	2038	ı
2,2-Dimethylpropane	115	2044	Dioxane	127	1165	0
Dimethyl-N-propylamine	132	2266	Dioxolane	127	1166	1
Dimethyl sulfate	156	1595	Dipentene	128	2052	ı
Dimethyl sulfide	130	1164	Diphenylamine chloroarsine	154	1698	1
Dimethyl sulphate	156	1595	Diphenylchloroarsine	151	1699	ı
Dimethyl sulphide	130	1164	Diphenylchloroarsine, liquid	151	1699	ľ
Dimethylthiophosphoryl chloride	156	2267	Diphenylchloroarsine, solid	151	1699	ŀ
Dimethylzinc	135	1370	Diphenyldichlorosilane	156	1769	ı
Dimyristyl peroxydicarbonate	148	2595	Diphenylmethane-4,4'-	156	2489	ı
Dimyristyl peroxydicarbonate, not more than 42%, in water	148	2892	diisocyanate Diphenylmethyl bromide	153	1770	1
Dinitroanilines	153	1596	Diphenyloxide-4,4'-	149	2951	1
Dinitrobenzenes	152	1597	disulfohydrazide		2001	1
Dinitrochlorobenzene	153	1577	Diphenyloxide-4,4'-	149	2951	1
Dinitro-o-cresol	153	1598	disulphohydrazide			1
Dinitrocyclohexylphenol	153	9026	Diphosgene	125	1076	1
Page 118	100	3020				1
Man and the second seco						

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Dipicryl sulfide, wetted with not less than 10% water	113	2852	Dithiocarbamate pesticide, liquid, flammable, toxic	131	2772
Dipicryl sulphide, wetted with not less than 10% water	113	2852	Dithiocarbamate pesticide, liquid, poisonous	151	3006
Dipropylamine 4-Dipropylaminobenzene-	132 149	2383	Dithiocarbamate pesticide, liquid, poisonous, flammable	131	3005
diazonium zinc chloride  Di-n-propyl ether	127	2384	Dithiocarbamate pesticide, liquid, toxic	151	3006
Dipropyl ether	127	2384	Dithiocarbamate pesticide, liquid, toxic, flammable	131	3005
Dipropyl ketone Di-n-propyl peroxydicarbonate	127 148	2710 2176	Dithiocarbamate pesticide, solid, poisonous	151	2771
Disinfectant, liquid, corrosive, n.o.s.	153	1903	Dithiocarbamate pesticide, solid, toxic	151	2771
Disinfectant, liquid, n.o.s.  Disinfectant, liquid, poisonous,	128 151	1993 3142	Di-(3,5,5-trimethyl-1,2- dioxolanyl-3)peroxide	148	2597
n.o.s.  Disinfectant, liquid, toxic, n.o.s.	454	2442	Divinyl ether, inhibited	131P	1167
Disinfectant, solid, poisonous,	151 151	3142 1601	Dodecylbenzenesulfonic acid  Dodecylbenzenesulphonic acid	153 153	2584 2584
n.o.s.			Dodecyltrichlorosilane	156	1771
Disinfectant, solid, toxic, n.o.s.  Disinfectants, corrosive, liquid,	151 153	1601	Driers, paint or varnish, liquid, n.o.s.	127	1168
n.o.s.  Disinfectants, liquid, n.o.s.	151	3142	Drugs, liquid, n.o.s.	154	1760
(poisonous)	131	0142	Drugs, liquid, n.o.s.	153	2810
Disinfectants, solid, n.o.s. (poisonous)	151	1601	Drugs, n.o.s. Drugs, n.o.s.	133	1325 1479
Disodium trioxosilicate	154	3253	Drugs, n.o.s.	128	1993
Disodium trioxosilicate,	154	3253	Drugs, solid, n.o.s.	154	1759
pentahydrate			Drugs, solid, n.o.s.	154	2811
Dispersant gas, n.o.s.	126	1078	Dry ice	120	1845
Dispersant gas, n.o.s. (flammable)	115	1954	Dye, liquid, corrosive, n.o.s.	154	2801
Distearyl peroxydicarbonate	145	2592	Dye, liquid, poisonous, n.o.s.	151	1602
Disulfoton	152	2783	Dye, liquid, toxic, n.o.s.	151	1602 3147
Dithiocarbamate pesticide,	131	2772	Dye, solid, corrosive, n.o.s.  Dye, solid, poisonous, n.o.s.	154	3147
liquid, flammable, poisonous			5,0, 30110, poisonous, 11.0.3.		ae 119

Name of Material	Guide No.	ID No.	Name of Material (	No.	
Dye, solid, toxic, n.o.s.	151	3143	Environmentally hazardous substances, liquid, n.o.s.	171	3082
Dye intermediate, liquid, corrosive, n.o.s.	154	2801	Environmentally hazardous	171	3077
Dye intermediate, liquid, poisonous, n.o.s.	151	1602	substances, solid, n.o.s.  Epibromohydrin	131	2558
Dye intermediate, liquid, toxic,	151	1602	Epichlorohydrin	131P	2023
n.o.s.			1,2-Epoxy-3-ethoxypropane	127	2752
Dye intermediate, solid, corrosive, n.o.s.	154	3147	Esters, n.o.s.	127	3272
Dye intermediate, solid,	151	3143	Etching acid, liquid, n.o.s.	157	1790
poisonous, n.o.s.	131	3143	Ethane	115	1035
Dye intermediate, solid, toxic,	151	3143	Ethane, compressed	115	1035
n.o.s.			Ethane, refrigerated liquid	115	1961
EDTA	171	9117	Ethane-Propane mixture,	115	1961
Elevated temperature liquid,	128	3256	refrigerated liquid	407	4470
flammable, n.o.s., with flash point above 37.8° C (100° F			Ethanol	127	1170
at or above its flash point			Ethanol, solution Ethanolamine	127	1170
Elevated temperature liquid,	128	3256	Ethanolamine, solution	153 153	2491 2491
flammable, n.o.s., with flash point above 60.5° C (141° F				127	3271
at or above its flash point			Ethers, n.o.s.	152	2783
Elevated temperature liquid,	128	3257	Ethyl acetate	129	1173
n.o.s., at or above 100° C (212° F) and below its flash			Ethyl acetylene, inhibited		2452
point			Ethyl acrylate, inhibited		1917
Elevated temperature material	, 128	9259	Ethyl alcohol	127	1170
liquid, n.o.s., (at or above			Ethyl alcohol, solution	127	1170
100° C (212° F) and below it flash point)	S		Ethylamine	118	1036
Elevated temperature solid, n.o.s., at or above 240° C (464° F)	171	3258	Ethylamine, aqueous solution, with not less than 50% but not more than 70% Ethylamine	132	2270
Endosulfan	151	2761	Ethyl amyl ketone	127	2271
Engine starting fluid	115	1960	2-Ethylaniline	153	2273
Engines, internal combustion,	128	3166	N-Ethylaniline	153	2272
including when fitted in			Ethylbenzene	129	1175
machinery or vehicles			N-Ethyl-N-benzylaniline	153	2274
Page 120	_				

N-E Ethy Eth

Name of Material	Suide No.		Name of Material 6	euide No.	
N-Ethylbenzyltoluidines	153	2753	Ethylene, refrigerated liquid	115	1038
Ethyl borate	129	1176	(cryogenic liquid)		
Ethyl bromide	131	1891	Ethylene chlorohydrin	131	1135
Ethyl bromoacetate	155	1603	Ethylenediamine	132	1604
2-Ethylbutanol	129	2275	Ethylenediaminetetraacetic acid		9117
2-Ethylbutyl acetate	129	1177	Ethylene dibromide	154	1605
Ethylbutyl acetate	129	1177	Ethylene dibromide and Methyl bromide mixture, liquid	151	1647
Ethyl butyl ether	127	1179	Ethylene dichloride	129	1184
2-Ethylbutyraldehyde	129	1178	Ethylene glycol diethyl ether	127	1153
Ethyl butyrate	129	1180	Ethylene glycol monobutyl ether		2369
Ethyl chloride	115	1037	Ethylene glycol monoethyl ether		1171
Ethyl chloroacetate	155	1181	Ethylene glycol monoethyl ether		1172
Ethyl chloroformate	155	1182	acetate	123	1172
Ethyl 2-chloropropionate	132	2935	Ethylene glycol monomethyl	127	1188
Ethyl chlorothioformate	155	2826	ether		
Ethyl crotonate	129	1862	Ethylene glycol monomethyl ether acetate	129	1189
Ethyl cyanoacetate	156	2666		131P	1185
Ethyl-3,3-di-(tert-butyl- peroxy)butyrate	146	2184	Ethyleneimine, inhibited Ethylene oxide	119	1040
Ethyl-3,3-di-(tert- butylperoxy)butyrate	145	2598	dioxide mixture, with more	. 115	1041
Ethyl-3,3-di-(tert-butyl- peroxy)butyrate, not more	145	2185	than 9% but not more than 87% Ethylene oxide		
than 77% in solution			Ethylene oxide and Carbon	119	3300
Ethyldichloroarsine	151	1892	dioxide mixture, with more than 87% Ethylene oxide		
Ethyldichlorosilane	139	1183	Ethylene oxide and Carbon	115	1041
Ethylene	116P	1962	dioxide mixtures, with more		
Ethylene, Acetylene and	116	3138	than 6 % Ethylene oxide		
Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with			Ethylene oxide and Carbon dioxide mixtures, with not more than 6% Ethylene oxide	126	1952
not more than 22.5% Acetylene and not more than 6% Propylene.			Ethylene oxide and Carbon dioxide mixtures, with not more than 9% Ethylene oxide	126	1952
Ethylene, compressed	116P	1962	The second secon		ao 121

	Name of Material	Guide No.	ID No.	Name of Material	Guide No.		Nai
1	Ethylene oxide and	126	3297	Ethyl methyl ketone	127	1193	Ferr
1	Chlorotetrafluoroethane			Ethyl nitrate	128	1993	Ferr
ı	mixture, with not more than 8.8% Ethylene oxide			Ethyl nitrite, solution	131	1194	Ferr
1	Ethylene oxide and	126	3070	Ethyl orthoformate	129	2524	Fer
ı	Dichlorodifluoromethane			Ethyl oxalate	156	2525	Feri
1	mixture, with not more than 12.5% Ethylene oxide			Ethylphenyldichlorosilane	156	2435	Fer
ı	Ethylene oxide and Dichlorodifluoromethane	126	3070	Ethyl phosphonothioic dichloride, anhydrous	154	2927	Fer Fer
۱	mixtures, with not more than 12% Ethylene oxide			Ethyl phosphonous dichloride, anhydrous	135	2845	Fer
ı	Ethylene oxide and	126	3298	Ethyl phosphorodichloridate	154	2927	
ı	Pentafluoroethane mixture,			1-Ethylpiperidine	132	2386	Fel
ı	with not more than 7.9% Ethylene oxide			Ethyl propionate	129	1195	Fer
ı	Ethylene oxide and Propylene	129P	2983	2-Ethyl-3-propylacrolein	153		Fel
1	oxide mixture, with not more			Ethyl propyl ether	127	2615	Fe
ı	than 30% Ethylene oxide			Ethyl silicate	132	1292	Fe
ı	Ethylene oxide and Tetrafluoroethane mixture,	126	3299	Ethylsulfuric acid	156	2571	Fe
ı	with not more than 5.6%			Ethylsulphuric acid	156	2571	Fe Fe
ı	Ethylene oxide			N-Ethyltoluidines	153	2754	
ı	Ethylene oxide with Nitrogen	119	1040	Ethyltrichlorosilane	155	1196	Fe
ı	Ethyl ether	127	1155	Etiologic agent, n.o.s.	158	2814	Fe
ı	Ethyl fluoride	115	2453	Explosive A	112		F
ı	Ethyl formate	129	1190	Explosive B	112		F
ı	Ethylhexaldehydes	129	1191	Explosive C	114	1	
	2-Ethylhexylamine	132	2276	Explosives, division 1.1, 1.2,	112	1	F
ı	2-Ethylhexyl chloroformate	156	2748	1.3, 1.5 or 1.6			ı
	Ethyl isobutyrate	129	2385	Explosives, division 1.4	114		F
	Ethyl isocyanate	155	2481	Extracts, aromatic, liquid	127	1169	1
	Ethyl lactate	129	1192	Extracts, flavoring, liquid	127	1197	1
	Ethyl mercaptan	130	2363	Extracts, flavouring, liquid	127	1197	1
	Ethyl methacrylate	129P	2277	Fabrics, animal, synthetic or	133	1373	1
	Ethyl methacrylate, inhibited	129P	2277	vegetable, n.o.s., with oil	. 422	1252	
	Ethyl methyl ether	115	1039	Fabrics impregnated with weak nitrated Nitrocellulose, n.o.s.		1353	-
-	200 122						4

U.	Name of Material (	9uide No.	No.	Name of Material (	Suide No.	No.
	Ferric ammonium citrate	171	9118	Fibres, vegetable, dry	133	
ı	Ferric ammonium oxalate	171	9119	Fibres impregnated with weakly	133	1353
ı	Ferric arsenate	151	1606	nitrated Nitrocellulose, n.o.s.		
ı	Ferric arsenite	151	1607	Film	133	1324
1	Ferric chloride	157	1773	Films, nitrocellulose base	133	1324
ı	Ferric chloride, anhydrous	157	1773	Fire extinguisher charges,	154	1774
ı	Ferric chloride, solution	154	2582	corrosive liquid  Fire extinguishers with	400	1011
ı	Ferric fluoride	171	9120	compressed gas	126	1044
l	Ferric nitrate	140	1466	Fire extinguishers with	126	1044
ı	Ferric sulfate	171	9121	liquefied gas		
ı	Ferric sulphate	171	9121	Firelighters, solid, with	133	2623
	Ferrocerium	170	1323	flammable liquid		
l	Ferrosilicon	139	1408	First aid kit	171	3316
I	Ferrous ammonium sulfate	171	9122	Fish meal, stabilized	171	2216
ŀ	Ferrous ammonium sulphate	171	9122	Fish meal, unstabilized	133	1374
ı	Ferrous arsenate	151	1608	Fish meal containing 6% to 12% water	171	2216
ı	Ferrous chloride, solid	154	1759	Fish meal containing less than	133	1374
ı	Ferrous chloride, solution	154	1760	6% or more than 12% water	133	13/4
ı	Ferrous metal borings, shavings, turnings or cuttings	170	2793	Fish scrap, stabilized	171	2216
ı	Ferrous sulfate	171	9125	Fish scrap, unstabilized	133	1374
ı	Ferrous sulphate	171	9125	Fish scrap containing 6% to 12% water	171	2216
ı	Fertilizer, ammoniating solution, with free Ammonia	125	1043	Fish scrap containing less than 6% or more than 12% water	133	1374
l	Fiber, animal, synthetic or vegetable, n.o.s., with oil	133	1373	Flame retardant compound, liquid (corrosive)	154	1760
	Fiber, animal or vegetable, n.o.s., burnt, wet or damp	133	1372	Flammable gas in lighter for cigars, cigarettes, etc.	115	1057
	Fibers	133	1372	Flammable liquid, corrosive,	132	2924
	Fibers impregnated with weakly nitrated Nitrocellulose, n.o.s.	133	1353	n.o.s. Flammable liquid, n.o.s.	128	1993
	Fibres, animal, synthetic or vegetable, n.o.s., with oil	133	1373	Flammable liquid, poisonous, corrosive, n.o.s.	131	3286
	Fibres, animal or vegetable, burnt, wet or damp	133		Flammable liquid, poisonous, n.o.s.	131	1992
	ARTON CONTRACTOR OF THE PARTY OF			Control of the Contro	Pac	ge 123

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Flammable liquid, toxic, corrosive, n.o.s.	131	3286	Fluorine, refrigerated liquid (cryogenic liquid)	167	9192
Flammable liquid, toxic, n.o.s.	131	1992	Fluoroacetic acid	156	2642
Flammable liquid preparations	, 127	1142	Fluoroanilines	153	2941
n.o.s.			Fluorobenzene	130	2387
Flammable liquids, elevated temperature material, n.o.s.	128	9276	Fluoroboric acid	154	1775
Flammable solid, corrosive, inorganic, n.o.s.	134	3180	Fluorophosphoric acid, anhydrous	154	1776
Flammable solid, corrosive,	134	2925	Fluorosilicates, n.o.s.	151	2856
n.o.s.	, 0,1	2020	Fluorosilicic acid	154	1778
Flammable solid, corrosive,	134	2925	Fluorosulfonic acid	137	1777
organic, n.o.s.			Fluorosulphonic acid	137	1777
Flammable solid, inorganic,	134	3180	Fluorotoluenes	130	2388
corrosive, n.o.s.	122	2170	Fluosilicic acid	154	1778
Flammable solid, inorganic, n.o.s.	133	3178	Formaldehyde, solution, flammable	132	1198
Flammable solid, n.o.s.	133	1325	Formaldehyde, solutions	132	1198
Flammable solid, organic, molten, n.o.s.	133	3176	(Formalin)		
Flammable solid, organic, n.o.s		1325	Formaldehyde, solutions (Formalin) (corrosive)	132	2209
Flammable solid, oxidizing,	140	3097	Formic acid	153	1779
Flammable solid, poisonous,	134	3179	Fuel, aviation, turbine engine	128	1863
inorganic, n.o.s.	134	31/9	Fuel oil	128	1202
Flammable solid, poisonous,	134	2926	Fuel oil	128	1993
n.o.s.			Fuel oil, no. 1,2,4,5,6	128	1202
Flammable solid, poisonous,	134	2926	Fumaric acid	171	9126
organic, n.o.s.	404	0470	Fumaryl chloride	156	1780
Flammable solid, toxic, inorganic, n.o.s.	134	3179	Furan	127	2389
Flammable solid, toxic, organic	. 134	2926	Furfural	132P	1199
n.o.s.			Furfuraldehydes		1199
Flue dust, poisonous	154	2811	Furfuryl alcohol	153	2874
Fluoboric acid	154	1775	Furfurylamine	132	2526
Fluorine	124	1045	Fusee (rail or highway)	133	1325
Fluorine, compressed	124	1045	Fusel oil	127	1201
Page 124	1000			The second	-

		No.		No.	No.
Gallium	172	2803	Hafnium powder, dry	135	2545
Gas, refrigerated liquid, flammable, n.o.s.	115	3312	Hafnium powder, wetted with not less than 25% water		1326
Gas, refrigerated liquid, n.o.s.	120	3158	Halogenated irritating liquid,	159	1610
Gas, refrigerated liquid, oxidizing, n.o.s.	122	3311	n.o.s. Hay, wet, damp or contaminated	133	1327
Gas cartridges	115	2037	with oil		1
Gas drips, hydrocarbon	128	1864	Hazardous substance, liquid,	171	9188
Gas generator assemblies	171	8013	n.o.s.		
Gas identification set	123	9035	Hazardous substance, solid, n.o.s.	171	9188
Gasohol	128	1203	Hazardous waste, liquid, n.o.s.	171	3082
Gas oil	128	1202	Hazardous waste, liquid, n.o.s.	171	9189
Gasoline	128	1203	Hazardous waste, solid, n.o.s.	171	3077
Gas sample, non-pressurized,	115	3167	Hazardous waste, solid, n.o.s.	171	9189
flammable, n.o.s., not refrigerated liquid			Heater for refrigerator car, liquid fuel type	128	1993
Gas sample, non-pressurized, poisonous, flammable, n.o.s.,	119	3168	Heating oil, light	128	1202
not refrigerated liquid			Heat producing article	171	8038
Gas sample, non-pressurized,	123	3169	Helium	121	1046
poisonous, n.o.s., not refrigerated liquid			Helium, compressed	121	1046
Gas sample, non-pressurized, toxic, flammable, n.o.s., not	119	3168	Helium, refrigerated liquid (cryogenic liquid)	120	1963
refrigerated liquid			Helium-Oxygen mixture	122	1980
Gas sample, non-pressurized,	123	3169	Heptafluoropropane	126	3296
toxic, n.o.s., not refrigerated		100	n-Heptaldehyde	129	3056
liquid Constitution modified micro	171	3245	Heptanes	128	1206
Genetically modified micro- organisms	171	3245	n-Heptene	128	2278
Genetically modified organisms	171	9278	Hexachloroacetone	153	2661
Germane	119	2192	Hexachlorobenzene	152	2729
Glycerol alpha-	153	2689	Hexachlorobutadiene	151	2279
monochlorohydrin			Hexachlorocyclopentadiene	151	2646
Glycidaldehyde	131P	2622	Hexachloroethane	151	9037
Grenade, tear gas	159	2017	Hexachlorophene	151	2875
Guanidine nitrate	143	1467	Hexadecyltrichlorosilane	156	1781 ge 125

Name of Material	Guide No.	No.	Name of Material G	uide No.	
Hexadiene	130	2458	Hexyltrichlorosilane	156	1784
Hexaethyl tetraphosphate	151	1611	Hydrazine, anhydrous	132	2029
Hexaethyl tetraphosphate, liqu	uid <b>151</b>	1611	Hydrazine, aqueous solution,	153	2030
Hexaethyl tetraphosphate, sol	id <b>151</b>	1611	with not less than 37% but not more than 64% Hydrazine		
Hexaethyl tetraphosphate and compressed gas mixture	123	1612	Hydrazine, aqueous solution, with not more than 37%	152	3293
Hexaethyl tetraphosphate mixture, liquid	152	2783	Hydrazine Hydrazine, aqueous solutions,	132	2029
Hexafluoroacetone	125	2420	with more than 64% Hydrazine		-020
Hexafluoroacetone hydrate	151	2552	Hydrazine, aqueous solutions,	153	2030
Hexafluoroethane	126	2193	with not more than 64%		
Hexafluoroethane, compresse	d 126	2193	Hydrazine	152	2020
Hexafluorophosphoric acid	154	1782	Hydrazine hydrate	153 138	2030
Hexafluoropropylene	126	1858	Hydrides, metal, n.o.s.	154	1787
Hexafluoropropylene oxide	126	1956	Hydriodic acid	-	
Hexaldehyde	129	1207	Hydriodic acid, solution	154	1787
Hexamethylenediamine, solid	153	2280	Hydrobromic acid	154	1788
Hexamethylenediamine, solution	153	1783	Hydrobromic acid, solution Hydrocarbon gas, compressed,	154 115	1788 1964
Hexamethylene diisocyanate	156	2281	n.o.s.		1000
Hexamethyleneimine	132	2493	Hydrocarbon gas, liquefied, n.o.s.	115	1965
Hexamethylenetetramine	133	1328	Hydrocarbon gas mixture,	115	1964
3,3,6,6,9,9-Hexamethyl-1,2,4, tetraoxacyclononane	5- 146	2165	compressed, n.o.s.	115	1965
3,3,6,6,9,9-Hexamethyl-1,2,4, tetraoxacyclononane	5- 145	2166	Hydrocarbon gas mixture, liquefied, n.o.s.		
3,3,6,6,9,9-Hexamethyl-1,2,4, tetraoxacyclononane	5- <b>145</b>	2167	Hydrocarbon gas refills for small devices, with release device		3150
Hexamine	133	1328	Hydrocarbons, liquid, n.o.s.	128	3295
Hexanes	128	1208	Hydrochloric acid	157	1789
Hexanoic acid	154	1760	Hydrochloric acid, mixture	157	1789
Hexanoic acid	153	2829	Hydrochloric acid, solution	157	1789
Hexanols	129	2282	Hydrocyanic acid, aqueous solution, with less than 5%	154	1613
1-Hexene	128	2370	Hydrogen cyanide		
The latest line in the latest li			7 10 7 10		

	Name of Material (	Guide No.	-	Name of Material	Guide No.	ID No.
	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide	154	1613	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyánide	131	3294
	Hydrocyanic acid, aqueous	117	1051	Hydrogen cyanide, stabilized	117	1051
	solutions, with more than 20% Hydrogen cyanide			Hydrogen cyanide, stabilized (absorbed)	131	1614
	Hydrocyanic acid, liquefied	117	1051	Hydrogendifluorides, n.o.s.	154	1740
	Hydrofluoric acid	157	1790	Hydrogen fluoride, anhydrous	125	1052
ı	Hydrofluoric acid, solution	157	1790	Hydrogen iodide, anhydrous	125	2197
	Hydrofluoric acid and Sulfuric acid mixture	157	1786	Hydrogen peroxide, aqueous solution, stabilized, with more		2015
	Hydrofluoric acid and Sulphuric acid mixture	157	1786	than 60% Hydrogen peroxide	440	2004
	Hydrofluorosilicic acid	154	1778	Hydrogen peroxide, aqueous solution, with not less than 8%	140	2984
	Hydrofluosilicic acid	154	1778	but less than 20% Hydrogen		
	Hydrogen	115	1049	peroxide		
	Hydrogen, compressed	115	1049	Hydrogen peroxide, aqueous solution, with not less than	140	2014
	Hydrogen, refrigerated liquid (cryogenic liquid)	115	1966	20% but not more than 60% Hydrogen peroxide (stabilized		Ť.
l	Hydrogen and Carbon monoxide mixture	119	2600	as necessary) Hydrogen peroxide, stabilized	143	2015
	Hydrogen and Carbon monoxide mixture, compressed	119	2600	Hydrogen peroxide and Peroxyacetic acid mixture,	-140	3149
	Hydrogen and Methane mixture, compressed	115	2034	with acid(s), water and not more than 5% Peroxyacetic acid, stabilized		
	Hydrogen bromide, anhydrous	125	1048	Hydrogen selenide, anhydrous	117	2202
	Hydrogen chloride, anhydrous	125	1050	Hydrogen sulfide	117	1053
	Hydrogen chloride, refrigerated liquid	125	2186	Hydrogen sulfide, liquefied	117	1053
	Hydrogen cyanide, anhydrous,	117	1051	Hydrogen sulphide	117	1053
	stabilized		-	Hydrogen sulphide, liquefied	117	1053
	Hydrogen cyanide, anhydrous,	131	1614	Hydroquinone	153	2662
	stabilized (absorbed)	154	1613	3-(2-Hydroxyethoxy)-4- pyrrolidin-1-yl benzene-	150	3035
	Hydrogen cyanide, aqueous solution, with not more than	134	1013	diazonium zinc chloride		
	20% Hydrogen cyanide			Hydroxylamine sulfate	154	2865
				Hydroxylamine sulphate	154	2865
	AND DESCRIPTION OF THE PERSON NAMED IN	Was a	12.7	TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pag	ge 127

	Name of Material G	euide No.	No.	Name of Material G	euide No.	
j	Hypochlorite solution	154	1791	Isobutane mixture	115	1075
	Hypochlorite solution, with more	154	1791	Isobutane mixture	115	1969
	than 5% available Chlorine			Isobutanol	129	1212
	Hypochlorites, inorganic, n.o.s.	140	3212	Isobutyl acetate	129	1213
	3,3'-Iminodipropylamine	153	2269	Isobutyl acrylate	130P	2527
	Infectious substance, affecting	158	2900	Isobutyl acrylate, inhibited	130P	2527
1	animals only	150	2011	Isobutyl alcohol	129	1212
1	Infectious substance, affecting humans	158	2814	Isobutyl aldehyde	129	2045
	Ink, printer's, flammable	129	1210	Isobutylamine	132	1214
	Insecticide, dry, n.o.s.	151	2588	Isobutyl chloroformate	155	2742
	Insecticide, liquefied gas	126	1968	Isobutylene	115	1055
1	Insecticide, liquefied gas,	123	1967	Isobutylene	115	1075
	containing Poison A or			Isobutyl formate	132	2393
	Poison B material	454	2002	Isobutyl isobutyrate	129	2528
	Insecticide, liquid, poisonous, n.o.s.	151	2902	Isobutyl isocyanate	155	2486
	Insecticide gas, flammable,	115	1954	Isobutyl methacrylate	130P	2283
	n.o.s.			Isobutyl methacrylate, inhibited	130P	2283
	Insecticide gas, n.o.s.	126	1968	Isobutyl propionate	129	2394
	Insecticide gas, poisonous,	123	1967	Isobutyraldehyde	129	2045
	n.o.s.			Isobutyric acid	132	2529
	Insecticide gas, toxic, n.o.s.	123	1967	Isobutyric anhydride	132	2530
	lodine monochloride	157	1792	Isobutyronitrile	131	2284
	lodine pentafluoride	144	2495	Isobutyryl chloride	132	2395
	2-lodobutane	129	2390	Isocyanate solution, flammable,	155	2478
	lodomethylpropanes	129	2391	poisonous, n.o.s.		1.1
	lodopropanes	129	2392	Isocyanate solution, flammable, toxic, n.o.s.	155	2478
	IPDI	156	2290	Isocyanate solution, poisonous,	155	3080
	Iron oxide, spent	135	1376	flammable, n.o.s.	135	3000
	Iron pentacarbonyl	131	1994	Isocyanate solution, poisonous,	155	2206
	Iron sponge, spent	135	1376	n.o.s.		
п	Irritating agent, n.o.s.	159	1693	Isocyanate solution, toxic,	155	3080
1	Isobutane	115	1075	flammable, n.o.s.		
	Isobutane	115	1969	Isocyanate solution, toxic, n.o.s.	155	2206
-	Page 128	100	The same	CONTRACTOR OF THE PARTY OF		

Name of Material	Guide No.	No.	Name of Material	Guide No.	
Isocyanate solutions, n.o.s.	155	2206	Isopropanolamine	171	9127
Isocyanate solutions, n.o.s.	155	2478	dodecylbenzenesulphonate		951
Isocyanate solutions, n.o.s.	155	3080	Isopropenyl acetate	129P	2403
Isocyanate solutions, n.o.s.	155	2207	Isopropenylbenzene	128	2303
(toxic)			Isopropyl acetate	129	1220
Isocyanates, flammable,	155	2478	Isopropyl acid phosphate	153	1793
poisonous, n.o.s.	155	2478	Isopropyl alcohol	129	1219
Isocyanates, flammable, toxic, n.o.s.	133	2410	Isopropylamine	132	1221
Isocyanates, n.o.s.	155	2206	Isopropylbenzene	131	1918
Isocyanates, n.o.s.	155	2478	Isopropyl butyrate	129	2405
Isocyanates, n.o.s.	155	3080	Isopropyl chloroacetate	155	2947
Isocyanates, n.o.s. (toxic)	155	2207	Isopropyl chloroformate	155	2407
Isocyanates, poisonous,	155	3080	Isopropyl 2-chloropropionate	132	2934
flammable, n.o.s.			Isopropyl isobutyrate	131	2406
Isocyanates, poisonous, n.o.s.	155	2206	Isopropyl isocyanate	155	2483
Isocyanates, toxic, flammable,	155	3080	Isopropyl mercaptan	130	2402
n.o.s.			Isopropyl nitrate	130	1222
Isocyanates, toxic, n.o.s.	155	2206	Isopropyl percarbonate,	148	2133
Isocyanatobenzotrifluorides	156	2285	unstabilized		
Isoheptene	128	2287	Isopropyl peroxydicarbonate	148	2133
Isohexene	128	2288	Isopropyl peroxydicarbonate	148	2134
Isononanoyl peroxide	148	2128	Isopropyl propionate	129	2409
Isooctane	128	1262	Isosorbide dinitrate mixture	133	2907
Isooctene	128	1216	Isosorbide-5-mononitrate	133	3251
Isopentane	128	1265	Kerosene	128	1223
Isopentanoic acid	154	1760	Ketones, liquid, n.o.s.	127	1224
Isopentenes	128	2371	Krypton	121	1056
Isophoronediamine	153	2289	Krypton, compressed	121	1056
Isophorone diisocyanate	156	2290	Krypton, refrigerated liquid (cryogenic liquid)	120	1970
Isoprene, inhibited	130P		Lacquer chips, dry	133	2557
Isopropanol	129	1219	Lauroyl peroxide	145	2124
Isopropanolamine dodecylbenzenesulfonate	171	9127			7
			THE RESERVE AND ADDRESS OF THE PARTY OF THE	- 0	an 120

Name of Material	Suide No.	No.	Name of Material G	uide No.	
Lauroyl peroxide, not more than	145	2893	Lindane	151	2761
42%, stable dispersion, in			Liquefied gas (nonflammable)	121	1058
water '	454	0500	Liquefied gas, flammable, n.o.s.	115	1954
Leachable toxic waste	151	9500	Liquefied gas, flammable, n.o.s.	115	3161
Lead acetate	151	1616	Liquefied gas, flammable,	119	1953
Lead arsenates	151	1617	poisonous, n.o.s.		
Lead arsenites	151	1618	Liquefied gas, flammable,	119	1953
Lead chloride	151	2291	poisonous, n.o.s. (Inhalation Hazard Zone A)		
Lead compound, soluble, n.o.s.	151	2291	Liquefied gas, flammable,	119	1953
Lead cyanide	151	1620	poisonous, n.o.s. (Inhalation		1333
Lead dioxide	141	1872	Hazard Zone B)		
Lead fluoborate	151	2291	Liquefied gas, flammable,	119	1953
Lead fluoride	154	2811	poisonous, n.o.s. (Inhalation Hazard Zone C)		
Lead nitrate	141	1469	Liquefied gas, flammable,	119	1953
Lead perchlorate	141	1470	poisonous, n.o.s. (Inhalation	113	1900
Lead perchlorate, solid	141	1470	Hazard Zone D)		
Lead perchlorate, solution	141	1470	Liquefied gas, flammable, toxic,	119	1953
Lead peroxide	141	1872	n.o.s.		
Lead phosphite, dibasic	133	2989	Liquefied gas, flammable, toxic,	119	1953
Lead sulfate, with more than 3% free acid	154	1794	n.o.s. (Inhalation Hazard Zone A)		
Lead sulphate, with more than 3% free acid	154	1794	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	119	1953
Life-saving appliances, not self- inflating	171	3072	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard	119	1953
Life-saving appliances, self- inflating	171	2990	Zone C)	440	4050
Lighter refills (cigarettes) (flammable gas)	115	1057	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	119	1953
Lighters (cigarettes)	115	1057	Liquefied gas, n.o.s.	126	1956
(flammable gas)			Liquefied gas, n.o.s.	126	3163
Lighters for cigars, cigarettes etc. with lighter fluid	127	1226	Liquefied gas, oxidizing, n.o.s.	122	3157
Lighters for cigars, cigarettes (flammable liquid)	127	1226	Liquefied gas, poisonous, corrosive, n.o.s.	123	3308

Name of Material	euide No.		Name of Material G	No.	
Liquefied gas, poisonous,	123	3308	Liquefied gas, poisonous, n.o.s.	123	1955
corrosive, n.o.s. (Inhalation Hazard Zone A)		in l	Liquefied gas, poisonous, n.o.s.		3162
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation	123	3308	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123	3162
Hazard Zone B)			Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123	1955
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3308	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	123	3162
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation	123	3308	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)		1955
Hazard Zone D)  Liquefied gas, poisonous,	119	3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	3162
flammable, corrosive, n.o.s. Liquefied gas, poisonous,	119	3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	1955
flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)			Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123	3162
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)		1955
Liquefied gas, poisonous,	119	3309	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	124	3310
flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)			Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	124	3310
Liquefied gas, poisonous, flammable, corrosive, n.o.s.	119	3309	(Inhalation Hazard Zone A)	404	2240
(Inhalation Hazard Zone D)			Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	124	3310
Liquefied gas, poisonous, flammable, n.o.s.	119	3160	(Inhalation Hazard Zone B) Liquefied gas, poisonous,	124	3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation	119	3160	oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)		0010
Hazard Zone A) Liquefied gas, poisonous,	119	3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	124	3310
flammable, n.o.s. (Inhalation Hazard Zone B)		3100	(Inhalation Hazard Zone D)	404	3307
Liquefied gas, poisonous,	119	3160	Liquefied gas, poisonous, oxidizing, n.o.s.	124	3307
flammable, n.o.s. (Inhalation Hazard Zone C)			Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation	124	3307
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119	3160	Hazard Zone A)		
	_	-	THE RESERVE OF THE PERSON NAMED IN	D.	age 131

Name of Material	Guide No.	ID No.	Name of Material G	euide No.	
Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3307	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	3160
Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3307	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	3160
Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3307	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	3160
Liquefied gas, toxic, corrosive, n.o.s.	123	3308	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard	119	3160
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard	123	3308	Zone D) Liquefied gas, toxic, n.o.s.	123	1955
Zone A)			Liquefied gas, toxic, n.o.s.	123	3162
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	1955
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	3162
Zone C)			Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	1955
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	3162
Liquefied gas, toxic, flammable corrosive, n.o.s.	, 119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	1955
Liquefied gas, toxic, flammable corrosive, n.o.s. (Inhalation	, 119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	3162
Hazard Zone A) Liquefied gas, toxic, flammable	, 119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	1955
corrosive, n.o.s. (Inhalation Hazard Zone B)	E .		Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	3162
Liquefied gas, toxic, flammable corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3309	Liquefied gas, toxic, oxidizing, corrosive, n.o.s.	124	3310
Liquefied gas, toxic, flammable corrosive, n.o.s. (Inhalation Hazard Zone D)	, 119	3309	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3310
Liquefied gas, toxic, flammable n.o.s.	, 119	3160	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3310
4.5					

	Name of Material G	uide No.		Name of Material	No.	No.
	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3310	Lithium batteries contained in equipment	138	3091
	Liquefied gas, toxic, oxidizing,	124	3310	Lithium batteries packed with equipment	138	3091
i	corrosive, n.o.s. (Inhalation Hazard Zone D)			Lithium borohydride	138	1413
I	Liquefied gas, toxic, oxidizing,	124	3307	Lithium chromate	171	9134
i	n.o.s.			Lithium ferrosilicon	139	2830
	Liquefied gas, toxic, oxidizing,	124	3307	Lithium hydride	138	1414
	n.o.s. (Inhalation Hazard Zone A)			Lithium hydride, fused solid	138	2805
	Liquefied gas, toxic, oxidizing,	124	3307	Lithium hydroxide, monohydrate	154	2680
	n.o.s. (Inhalation Hazard	127	3307	Lithium hydroxide, solid	154	2680
	Zone B)			Lithium hydroxide, solution	154	2679
	Liquefied gas, toxic, oxidizing,	124	3307	Lithium hypochlorite, dry	140	1471
	n.o.s. (Inhalation Hazard Zone C)			Lithium hypochlorite mixture	140	1471
	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard	124	3307	Lithium hypochlorite mixtures, dry	140	1471
	Zone D)		1000	Lithium nitrate	140	2722
	Liquefied gases, non-flammable,	121	1058	Lithium nitride	138	2806
	charged with Nitrogen,		200	Lithium peroxide	143	1472
	Carbon dioxide or Air	445	4070	Lithium silicon	138	1417
	Liquefied natural gas (cryogenic liquid)	115	1972	LNG (cryogenic liquid) London purple	115 151	1972 1621
	Liquefied petroleum gas	115	1075	LPG	115	1075
	Lithium	138	1415	Magnesium	138	1869
	Lithium acetylide- Ethylenediamine complex	138	2813	Magnesium, in pellets, turnings	138	1869
	Lithium alkyls	135	2445	or ribbons	405	2052
	Lithium aluminum hydride	138	1410	Magnesium alkyls	135	3053
	Lithium aluminum hydride, ethereal	138	1411	Magnesium alloys, with more than 50% Magnesium, in pellets, turnings or ribbons	138	1869
	Lithium amide	139	1412	Magnesium alloys powder	138	1418
	Lithium batteries	138	3090	Magnesium aluminum phosphide		1419
	Lithium batteries, liquid or solid	138	3090	Magnesium arsenate	151	1622
	cathode			Magnesium bisulfite solution	154	2693
				Magnesium bisulphite solution	154	2693
		7.15	787		Pa	ge 133

Name of Material	Guide No.	No.	Name of Material	Guide No.	
Magnesium bromate	140	1473	Medicine, liquid, flammable,	131	3248
Magnesium chlorate,	140	2723	poisonous, n.o.s.		
Magnesium chloride and Chlorate mixture	140	1459	Medicine, liquid, flammable, toxic, n.o.s.	131	3248
Magnesium diamide	135	2004	Medicine, liquid, poisonous, n.o.s.	151	1851
Magnesium diphenyl	135	2005	Medicine, liquid, toxic, n.o.s.	151	1851
Magnesium fluorosilicate	151	2853	Medicine, solid, poisonous,	151	3249
Magnesium granules, coated	138	2950	n.o.s.	131	3243
Magnesium hydride	138	2010	Medicine, solid, toxic, n.o.s.	151	3249
Magnesium nitrate	140	1474	Medicines, corrosive, liquid,	154	1760
Magnesium perchlorate	140	1475	n.o.s.		
Magnesium peroxide	140	1476	Medicines, corrosive, solid,	154	1759
Magnesium phosphide	139	2011	n.o.s.	400	4000
Magnesium powder	138	1418	Medicines, flammable, liquid,	128	1993
Magnesium scrap	138	1869	Medicines, flammable, solid,	133	1325
Magnesium silicide	138	2624	n.o.s.		1020
Magnesium silicofluoride	151	2853	Medicines, oxidizing	140	1479
Magnetized material	171	2807	substances, solid, n.o.s.		
Maleic acid	156	2215	Medicines, poisonous, liquid,	153	2810
Maleic anhydride	156	2215	n.o.s.	454	0044
Malononitrile	153	2647	Medicines, poisonous, solid, n.o.s.	154	2811
Maneb	135	2210	Medicines, toxic, liquid, n.o.s.	153	2810
Maneb, stabilized	135	2968	Medicines, toxic, solid, n.o.s.	154	2811
Maneb preparation, stabilized	135	2968	p-Menthane hydroperoxide	147	2125
Maneb preparation, with not les than 60% Maneb	s 135	2210	Mercaptan mixture, aliphatic	131	1228
Manganese nitrate	140	2724	Mercaptan mixture, liquid, flammable, poisonous, n.o.s.	131	1228
Manganese resinate	133	1330	Mercaptan mixture, liquid,	131	1228
Matches, fusee	133	2254	flammable, toxic, n.o.s.	131	1220
Matches, safety	133	1944	Mercaptan mixture, liquid,	131	3071
Matches, "strike anywhere"	133	1331	poisonous, flammable, n.o.s.		
Matches, wax "vesta"	133	1945	Mercaptan mixture, liquid, toxic	, 131	3071
Medical waste, n.o.s.	158	3291	flammable, n.o.s.		
the still before the					

Name of Material	Guide No.		Name of Material G	uide No.	No.
Mercaptan mixtures, liquid, n.o.s.	131	1228	Mercury based pesticide, liquid, poisonous	151	3012
Mercaptan mixtures, liquid, n.o.s.	131	3071	Mercury based pesticide, liquid, poisonous, flammable	131	3011
Mercaptans, liquid, flammable, poisonous, n.o.s.	131	1228	Mercury based pesticide, liquid, toxic	151	3012
Mercaptans, liquid, flammable, toxic, n.o.s.	131	1228	Mercury based pesticide, liquid, toxic, flammable	131	3011
Mercaptans, liquid, n.o.s.	131	3071	Mercury based pesticide, solid,	151	2777
Mercaptans, liquid, poisonous,	131	3071	poisonous		-9,110
flammable, n.o.s.	404	0074	Mercury based pesticide, solid, toxic	151	2777
Mercaptans, liquid, toxic, flammable, n.o.s.	131	3071	Mercury benzoate	154	1631
Mercuric arsenate	151	1623	Mercury bisulfate	151	1633
Mercuric bromide	154	1634	Mercury bisulphate	151	1633
Mercuric chloride	154	1624	Mercury bromides	154	1634
Mercuric cyanide	154	1636	Mercury compound, liquid, n.o.s.	151	2024
Mercuric nitrate	141	1625	Mercury compound, solid, n.o.s.	151	2025
Mercuric oxycyanide	151	1642	Mercury cyanide	154	1636
Mercuric potassium cyanide	157	1626	Mercury gluconate	151	1637
Mercuric sulfate	151	1645	Mercury iodide	151	1638
Mercuric sulphate	151	1645	Mercury metal	172	2809
Mercurous bromide	154	1634	Mercury nucleate	151	1639
Mercurous nitrate	141	1627	Mercury oleate	151	1640
Mercurous sulfate	151	1628	Mercury oxide	151	1641
Mercurous sulphate	151	1628	Mercury oxycyanide,	151	1642
Mercury	172	2809	desensitized	151	1643
Mercury, metallic	172	2809	Mercury potassium iodide	151	1644
Mercury acetate	151	1629	Mercury salicylate  Mercury sulfate	151	1645
Mercury ammonium chloride	151	1630	Mercury sulphate	151	1645
Mercury based pesticide, liquid flammable, poisonous	, 131	2778	Mercury thiocyanate	151	1646
Mercury based pesticide, liquid	131	2778	Mesityl oxide	129	1229
flammable, toxic	, 131	2110	Metal alkyl, solution, n.o.s.	135	9195
			Metal alkyl halides, n.o.s.	138	3049
					ge 135

Name of Material	Guide		Name of Material G	uide	
	No.	No.		No.	No.
Metal alkyl hydrides, n.o.s.	138	3050	Methanol	131	1230
Metal alkyls, n.o.s.	135	2003	Methoxymethyl isocyanate	155	2605
Metal aryl halides, n.o.s.	138	3049	4-Methoxy-4-methyl-	127	2293
Metal aryl hydrides, n.o.s.	138	3050	pentan-2-one		
Metal aryls, n.o.s.	135	2003	1-Methoxy-2-propanol	129	3092
Metal carbonyls, n.o.s.	151	3281	Methyl acetate	129	1231
Metal catalyst, dry	135	2881	Methyl acetone	127	1232
Metal catalyst, wetted	170	1378	Methylacetylene and Propadiene mixture,	116P	1060
Metaldehyde	133	1332	stabilized		
Metal hydrides, flammable,	170	3182	Methyl acrylate, inhibited	129P	1919
n.o.s.	120	1400	Methylal	127	1234
Metal hydrides, water-reactive, n.o.s.	138	1409	Methyl alcohol	131	1230
Metallic substance, water-	138	3208	Methylallyl chloride	129P	2554
reactive, n.o.s.			Methylamine, anhydrous	118	1061
Metallic substance, water-	138	3209	Methylamine, aqueous solution	132	1235
reactive, self-heating, n.o.s.	J.,		Methylamyl acetate	129	1233
Metal powder, flammable, n.o.s.		3089	Methylamyl alcohol	129	2053
Metal powder, self-heating, n.o.s.	135	3189	Methyl amyl ketone	127	1110
Metal salts of organic	133	3181	N-Methylaniline	153	2294
compounds, flammable, n.o.s		-,1-	Methyl benzoate	152	2938
Methacrylaldehyde	131P	2396	alpha-Methylbenzyl alcohol	153	2937
Methacrylaldehyde, inhibited	131P	2396	Methylbenzyl alcohol (alpha)	153	2937
Methacrylic acid, inhibited	153P	2531	Methyl bromide	123	1062
Methacrylonitrile, inhibited	131P	3079	Methyl bromide and Chloropicrin	123	1581
Methallyl alcohol	129	2614	mixtures  Methyl bromide and Ethylone	151	10.17
Methane	115	1971	Methyl bromide and Ethylene dibromide mixture, liquid	151	1647
Methane, compressed	115	1971	Methyl bromide and more than	123	1581
Methane, refrigerated liquid (cryogenic liquid)	115	1972	2% Chloropicrin mixture, liquid		
Methane and Hydrogen mixture, compressed	, 115	2034	Methyl bromide and nonflammable, nonliquefied	123	1955
Methanesulfonyl chloride	156	3246	compressed gas mixture		
Methanesulphonyl chloride	156	3246	Methyl bromoacetate	155	2643
0					

Name of Material	Guide No.		Name of Material (	Suide No.	
Methylbromoacetone	159		Methyl formate	129	1243
3-Methylbutan-2-one	127	2397	2-Methylfuran	127	2301
2-Methyl-1-butene	127	2459	2-Methyl-2-hepthanethiol	131	3023
2-Methyl-2-butene	127	2460	5-Methylhexan-2-one	127	2302
3-Methyl-1-butene	127	2561	Methylhydrazine	131	1244
N-Methylbutylamine	132	2945	Methyl iodide	151	2644
Methyl tert-butyl ether	127	2398	Methyl isobutyl carbinol	129	2053
Methyl butyrate	129	1237	Methyl isobutyl ketone	127	1245
Methyl chloride	115	1063	Methyl isobutyl ketone peroxide	147	2126
Methyl chloride and Chloropicrin	119	1582	Methyl isocyanate	155	2480
mixtures  Methyl chloride and Methylene	115	1912	Methyl isopropenyl ketone, inhibited	127P	1246
chloride mixture			Methyl isothiocyanate	131	2477
Methyl chloroacetate	155	2295	Methyl isovalerate	130	2400
Methyl chloroformate	155	1238	Methyl magnesium bromide in	135	1928
Methyl chloromethyl ether	131	1239	Ethyl ether		
Methyl 2-chloropropionate	132	2933	Methyl mercaptan	117	1064
Methylchlorosilane	119	2534	Methyl methacrylate monomer, inhibited	129P	1247
Methyl cyanide	131	1648	Methyl methacrylate monomer,	129P	1247
Methylcyclohexane	128	2296	uninhibited		1241
Methylcyclohexanols	129	2617	4-Methylmorpholine	132	2535
Methylcyclohexanone	127	2297	N-Methylmorpholine	132	2535
Methylcyclopentane	128	2298	Methylmorpholine	132	2535
Methyl dichloroacetate	155	2299	Methyl nitrite	116	2455
Methyldichloroarsine	152	1556	N-Methyl-N'-Nitro-N-	133	1325
Methyldichlorosilane	139	1242	Nitrosoguanidine		
Methylene chloride	160	1593	Methyl orthosilicate	155	2606
Methylene chloride and Methyl chloride mixture	115	1912	Methyl parathion, liquid	152 152	2783 3018
Methyl ethyl ether	115	1039	Methyl parathion, liquid	152	2783
Methyl ethyl ketone	127	1193	Methyl parathion, mixture, dry	152	2783
Methyl ethyl ketone peroxide	147	2550	Methylparathion, solid	127	2461
2-Methyl-5-ethylpyridine	153	2300	Methylpentadiene Methylpentage	128	2462
Methyl fluoride	115	2454	Methyl pentane	120	2402
	1000		THE RESERVE AND A STATE OF THE PARTY.	Pa	ge 137

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
2-Methylpentan-2-ol	129	2560	Naphtha, solvent	128	1256
Methylphenyldichlorosilane	156	2437	Naphthalene, crude	133	1334
Methyl phosphonic dichloride	137	9206	Naphthalene, molten	133	2304
Methyl phosphonous dichloride	135	2845	Naphthalene, refined	133	1334
1-Methylpiperidine	132	2399	Naphthenic acid	171	9137
Methyl propionate	129	1248	alpha-Naphthylamine	153	2077
Methyl propyl ether	127	2612	Naphthylamine (alpha)	153	2077
Methyl propyl ketone	127	1249	beta-Naphthylamine	153	1650
Methyltetrahydrofuran	127	2536	Naphthylamine (beta)	153	1650
Methyl trichloroacetate	156	2533	Naphthylthiourea	153	1651
Methyltrichlorosilane	155	1250	Naphthylurea	153	1652
alpha-Methylvaleraldehyde	130	2367	Natural gas, compressed	115	1971
Methyl valeraldehyde (alpha)	130	2367	Natural gas, refrigerated liquid	115	1972
Methyl vinyl ketone	131P	1251	(cryogenic liquid)		
Methyl vinyl ketone, stabilized	131P	1251	Natural gasoline	128	1257
Mevinphos	152	2783	Neohexane	128	1208
Mexacarbate	151	2757	Neon	121	1065
M.I.B.C.	129	2053	Neon, compressed	121	1065
Mining reagent, liquid	153	2022	Neon, refrigerated liquid (cryogenic liquid)	120	1913
Molybdenum pentachloride	156	2508	Nickel ammonium sulfate	474	0120
Monoethanolamine	153	2491	Nickel ammonium sulphate	171	9138
Mononitrotoluidines	153	2660	Nickel carbonyl	171	9138
Monopropylamine	132	1277		131	1259
Morpholine	132	2054	Nickel catalyst, dry Nickel chloride	135	2881
Morpholine, aqueous mixture	154	1760		151	9139
Morpholine, aqueous mixture	132	2054	Nickel cyanide	151	1653
Motor fuel anti-knock compound	131	1649	Nickel hydroxide Nickel nitrate	154	9140
Motor fuel anti-knock mixture	131	1649	Nickel nitrate Nickel nitrite	140	2725
Motor spirit	128	1203		140	2726
Muriatic acid	157	1789	Nickel sulfate	154	9141
Musk xylene	149	2956	Nickel sulphate	154	9141
Naphtha	128	2553	Nicotine	151	1654
Naphtha, petroleum	128	1255	Nicotine compound, liquid, n.o.s.	151	3144
Page 138	1.0	1.0	A SECULIAR S		O. Co.

Name of Material	Guide No.	No.	Name of Material	Suide No.	No.
Nicotine compound, solid, n.o.s	. 151	1655	Nitric oxide and Nitrogen dioxide	124	1975
Nicotine hydrochloride	151	1656	mixture		
Nicotine hydrochloride, solution	151	1656	Nitric oxide and Nitrogen tetroxide mixture	124	1975
Nicotine preparation, liquid, n.o.s.	151	3144	Nitriles, flammable, poisonous, n.o.s.	131	3273
Nicotine preparation, solid, n.o.s.	151	1655	Nitriles, flammable, toxic, n.o.s.	131	3273
Nicotine salicylate	151	1657	Nitriles, poisonous, flammable,	131	3275
Nicotine sulfate, solid	151	1658	n.o.s.		-
Nicotine sulfate, solution	151	1658	Nitriles, poisonous, n.o.s.	151	3276
Nicotine sulphate, solid	151	1658	Nitriles, toxic, flammable, n.o.s.	131	3275
Nicotine sulphate, solution	151	1658	Nitriles, toxic, n.o.s.	151	3276
Nicotine tartrate	151	1659	Nitrites, inorganic, aqueous solution, n.o.s.	140	3219
Nitrate, n.o.s.	140	1477	Nitrites, inorganic, n.o.s.	140	2627
Nitrates, inorganic, aqueous	140	3218	Nitroanilines	153	1661
solution, n.o.s.	140	4455	Nitroanisole	152	2730
Nitrates, inorganic, n.o.s.	140	1477	Nitroanisole, liquid	152	2730
Nitrating acid, spent	157	1826	Nitroanisole, solid	152	2730
Nitrating acid mixture	157	1796	Nitrobenzene	152	1662
Nitrating acid mixture, spent	157	1826	Nitrobenzenesulfonic acid	153	2305
Nitric acid, 40% or less	154	1760	Nitrobenzenesulphonic acid	153	2305
Nitric acid, fuming	157	2032	Nitrobenzotrifluorides	152	2306
Nitric acid, other than red fuming	-	2031	Nitrobromobenzene	152	2732
Nitric acid, other than red fuming, with more than 70%	157	2031	Nitrobromobenzene, liquid	152	2732
Nitric acid		55	Nitrobromobenzene, solid	152	2732
Nitric acid, other than red fuming, with not more than	157	2031	Nitrocellulose, block, wet, with not less than 25% alcohol	127	2059
70% Nitric acid		-	Nitrocellulose, colloided,	127	2059
Nitric acid, red fuming	157	2032	granular or flake, wet, with not less than 20% alcohol or		
Nitric oxide	124	1660	solvent		
Nitric oxide, compressed	124	1660	Nitrocellulose, colloided,	113	2555
Nitric oxide and Dinitrogen tetroxide mixture	124	1975	granular or flake, wet, with not less than 20% water		
The second secon					

Name of Material G	uide No.		Name of Material G	uide No.	
Nitrocellulose, solution, flammable	127	2059	Nitrogen dioxide and Nitric oxide mixture	124	1975
Nitrocellulose, solution, in a	127	2059	Nitrogen peroxide, liquid	124	1067
flammable liquid			Nitrogen tetroxide, liquid	124	1067
Nitrocellulose, wet, with not less than 30% alcohol or solvent	113	2556	Nitrogen tetroxide and Nitric oxide mixture	124	1975
Nitrocellulose membrane filters	133	3270	Nitrogen trifluoride	122	2451
Nitrocellulose mixture, without	133	2557	Nitrogen trifluoride, compressed	122	2451
plasticizer, without pigment	422	2557	Nitrogen trioxide	124	2421
Nitrocellulose mixture, without plasticizer, with pigment	133	2001	Nitroglycerin, solution in	127	3064
Nitrocellulose mixture, with plasticizer, without pigment	133	2557	alcohol, with more than 1% but not more than 5% Nitroglycerin		
Nitrocellulose mixture, with plasticizer, with pigment	133	2557	Nitroglycerin, solution in alcohol, with not more than	127	1204
Nitrocellulose with alcohol	113	2556	1% Nitroglycerin		
Nitrocellulose with not less than 25% alcohol	113	2556	Nitroglycerin mixture with more than 2% but not more than	113	3319
Nitrocellulose with plasticizing substance	133	2557	10% Nitroglycerin, desensitized		
Nitrocellulose with water, not less than 25% water	113	2555	Nitroguanidine (Picrite), wetted with not less than 20% water	113	1336
Nitrochlorobenzenes, liquid	152	1578	Nitroguanidine, wetted with not less than 20% water	113	1336
Nitrochlorobenzenes, solid	152	1578	Nitrohydrochloric acid	157	1798
3-Nitro-4-chlorobenzotrifluoride	152	2307	Nitromethane	129	1261
Nitrocresols	153	2446	Nitronaphthalene	133	2538
Nitroethane	129	2842	Nitrophenols	153	1663
Nitrogen	121	1066	Nitropropanes	129	2608
Nitrogen, compressed	121	1066	p-Nitrosodiethylaniline	135	2000
Nitrogen, refrigerated liquid (cryogenic liquid)	120	1977	p-Nitrosodimethylaniline	135	1369
Nitrogen and Rare gases mixture	121	1981	Nitrostarch, wet, with not less	113	1337
Nitrogen and Rare gases mixture, compressed	121	1981	than 30% alcohol or solvent Nitrostarch, wetted with not less	113	1337
Nitrogen dioxide	124	1067	than 20% water		
Nitrogen dioxide, liquefied	124	1067	Nitrostarch, wetted with not less than 30% solvent	113	1337

Name of Material	Puide No.		Name of Material	Guide No.	
Nitrosyl chloride	125	1069	Oleum	137	1831
Nitrosylsulfuric acid	157	2308	Oleum, with less than 30% free	137	1831
Nitrosylsulphuric acid	157	2308	Sulfur trioxide		
Nitrotoluenes	152	1664	Oleum, with less than 30% free Sulphur trioxide	137	1831
Nitrotoluenes, liquid	152	1664	Oleum, with not less than 30%	427	1001
Nitrotoluenes, solid	152	1664	free Sulfur trioxide	137	1831
Nitrotoluidines (mono)	153	2660	Oleum, with not less than 30%	137	1831
Nitrous oxide	122	1070	free Sulphur trioxide		
Nitrous oxide, compressed	122	1070	Organic peroxide, liquid, n.o.s.	146	9183
Nitrous oxide, refrigerated liquid	122	2201	Organic peroxide, solution,	146	9183
Nitrous oxide and Carbon	126	1015	n.o.s.	440	0407
dioxide mixture			Organic peroxide, solid, n.o.s.	146	9187
Nitroxylenes	152	1665	Organic peroxides, mixtures	146	2756
Nitroxylol	152	1665	Organic peroxides, n.o.s. (including trial quantities)	148	2899
Nonanes	128	1920	Organic peroxides, samples,	146	2255
Nonyltrichlorosilane	156	1799	n.o.s.	140	2200
2,5-Norbornadiene		2251	Organic peroxide type B, liquid	146	3101
2,5-Norbornadiene, inhibited		2251	Organic peroxide type B, liquid,	148	3111
Octadecyltrichlorosilane	156	1800	temperature controlled		
Octadiene		2309	Organic peroxide type B, solid	.146	3102
Octafluorobut-2-ene	126	2422	Organic peroxide type B, solid,	148	3112
Octafluorocyclobutane	126	1976	temperature controlled	440	0400
Octafluoropropane	126	2424	Organic peroxide type C, liquid	146	3103
Octanes	128	1262	Organic peroxide type C, liquid, temperature controlled	148	3113
Octanoyl peroxide	148	2129	Organic peroxide type C, solid	146	3104
Octyl aldehydes	129	1191	Organic peroxide type C, solid,	148	3114
tert-Octyl mercaptan	131	3023	temperature controlled		
Octyltrichlorosilane	156	1801	Organic peroxide type D, liquid	145	3105
Oil, n.o.s., flash point not less than 93° C (200° F)	171	9277	Organic peroxide type D, liquid, temperature controlled	148	3115
Oil, petroleum, n.o.s.	128	1270	Organic peroxide type D, solid	145	3106
Oil gas	119	1071	Organic peroxide type D, solid,	148	3116
Oil gas, compressed	119	1071	temperature controlled		

Name of Material G	uide No.		Name of Material G	uide No.	No.
Organic peroxide type E, liquid	145	3107	Organochlorine pesticide, liquid,	131	2995
Organic peroxide type E, liquid, temperature controlled	148	3117	poisonous, flammable Organochlorine pesticide, liquid,	151	2996
Organic peroxide type E, solid	145	3108	toxic		
Organic peroxide type E, solid, temperature controlled	148	3118	Organochlorine pesticide, liquid, toxic, flammable	131	2995
Organic peroxide type F, liquid	145	3109	Organochlorine pesticide, solid,	151	2761
Organic peroxide type F, liquid, temperature controlled	148	3119	poisonous Organochlorine pesticide, solid,	151	2761
Organic peroxide type F, solid	145	3110	toxic Organometallic compound,	151	3282
Organic peroxide type F, solid, temperature controlled	148	3120	poisonous, n.o.s.		
Organic phosphate, dry	152	2783	Organometallic compound, toxic, n.o.s.	151	3282
Organic phosphate, solid	152	2783	Organometallic compound,	138	3207
Organic phosphate compound, dry	152	2783	water-reactive, flammable, n.o.s.		
Organic phosphate compound, solid	152	2783	Organometallic compound dispersion, water-reactive,	138	3207
Organic phosphate compound	123	1955	flammable, n.o.s.  Organometallic compound	138	3207
mixed with compressed gas  Organic phosphate mixed with	123	1955	solution, water-reactive,	130	3201
compressed gas		1000	flammable, n.o.s.		0070
Organic phosphorus compound, dry	152	2783	Organophosphorus compound, poisonous, flammable, n.o.s.	131	3279
Organic phosphorus compound, solid	152	2783	Organophosphorus compound, poisonous, n.o.s.	151	3278
Organic phosphorus compound mixed with compressed gas	123	1955	Organophosphorus compound, toxic, flammable, n.o.s.	131	3279
Organic pigments, self-heating	135	3313	Organophosphorus compound,	151	3278
Organoarsenic compound, n.o.s.	151	3280	toxic, n.o.s.  Organophosphorus pesticide,	131	2784
Organochlorine pesticide, liquid, flammable, poisonous	131	2762	liquid, flammable, poisonous		
Organochlorine pesticide, liquid, flammable, toxic	131	2762	Organophosphorus pesticide, liquid, flammable, toxic	131	2784
Organochlorine pesticide, liquid,	151	2996	Organophosphorus pesticide, liquid, poisonous	152	3018
poisonous			Organophosphorus pesticide, liquid, poisonous, flammable	131	3017

Name of Material G	uide No.		Name of Material G	No.	No.
Organophosphorus pesticide,	152	3018	Oxidizer, corrosive, liquid, n.o.s.	140	9193
liquid, toxic		. 31	Oxidizer, corrosive, solid, n.o.s.	140	9194
Organophosphorus pesticide, liquid, toxic, flammable	131	3017	Oxidizer, poisonous, liquid, n.o.s.	142	9199
Organophosphorus pesticide, solid, poisonous	152	2783	Oxidizer, poisonous, solid, n.o.s.	141	9200
Organophosphorus pesticide, solid, toxic	152	2783	Oxidizing liquid, corrosive, n.o.s.	140	3098
Organotin compound, liquid, n.o.s.	153	2788	Oxidizing liquid, n.o.s.	140	3139
Organotin compound, solid,	153	3146	Oxidizing liquid, poisonous, n.o.s. Oxidizing liquid, toxic, n.o.s.	142	3099
Organotin pesticide, liquid,	131	2787	Oxidizing solid, corrosive, n.o.s.		3085
flammable, poisonous	131	2101	Oxidizing solid, flammable,	140	3137
Organotin pesticide, liquid,	131	2787	n.o.s.		
flammable, toxic		1	Oxidizing solid, n.o.s.	140	1479
Organotin pesticide, liquid, poisonous	153	3020	Oxidizing solid, poisonous, n.o.s.	141	3087
Organotin pesticide, liquid, poisonous, flammable	131	3019	Oxidizing solid, self-heating, n.o.s.	135	3100
Organotin pesticide, liquid, toxic	153	3020	Oxidizing solid, toxic, n.o.s.	141	3087
Organotin pesticide, liquid, toxic, flammable	131	3019	Oxidizing solid, water-reactive, n.o.s.	144	3121
Organotin pesticide, solid, poisonous	153	2786	Oxidizing substances, liquid, corrosive, n.o.s.	140	3098
Organotin pesticide, solid, toxic	153	2786	Oxidizing substances, liquid,	140	3139
ORM-A, n.o.s.	159	1693	n.o.s.	440	2000
ORM-B, n.o.s.	154	1760	Oxidizing substances, liquid, poisonous, n.o.s.	142	3099
ORM-E, liquid, n.o.s.	171	9188	Oxidizing substances, liquid,	142	3099
ORM-E, solid, n.o.s.	171	9188	toxic, n.o.s.		
Osmium tetroxide	154	2471	Oxidizing substances, self-	135	3100
Other regulated substance	171	8027	heating, n.o.s.		2005
Other regulated substances, liquid, n.o.s.	171	3082	Oxidizing substances, solid, corrosive, n.o.s.	141	3085
Other regulated substances, solid, n.o.s.	171	3077	Oxidizing substances, solid, flammable, n.o.s.	140	3137
Oxalates, water soluble	154	2449			
A STATE OF THE RESERVE OF THE RESERV	I ALL	11111		Pa	ge 143

	Name of Material	Guide		Name of Material	uide	
ì	THE PERSON NAMED IN COLUMN TWO	No.			No.	
	Oxidizing substances, solid, n.o.s.	140	1479	Paraldehyde	129	1264
	Oxidizing substances, solid,	141	3087	Parathion	152	2783
١	poisonous, n.o.s.		0007	Parathion and compressed gas mixture	123	1967
	Oxidizing substances, solid, self-heating, n.o.s.	135	3100	Parathion mixture, dry	152	2783
	Oxidizing substances, solid,	141	3087	Parathion mixture, liquid	152	2783
•	toxic, n.o.s.	141	3001	PCB	171	2315
١	Oxidizing substances, solid,	144	3121	Pelargonyl peroxide	148	2130
ı	which in contact with water			Pentaborane	135	1380
	emit flammable gases, n.o.s.	400	1070	Pentachloroethane	151	1669
1	Oxygen	122	1072	Pentachlorophenol	154	3155
١	Oxygen, compressed	122	1072	Pentafluoroethane	126	3220
١	Oxygen, refrigerated liquid (cryogenic liquid)	122	1073	Pentafluoroethane and Ethylene	126	3298
١	Oxygen and Carbon dioxide	122	1014	oxide mixture, with not more than 7.9% Ethylene oxide		
1	mixture			Pentamethylheptane	128	2286
١	Oxygen and Carbon dioxide mixture, compressed	122	1014	Pentan-2,4-dione	127	2310
ı	Oxygen and Rare gases mixture	122	1980	n-Pentane	128	1265
1	Oxygen and Rare gases mixture		1980	2,4-Pentanedione	127	2310
	compressed	, 122	1900	Pentane-2,4-dione	127	2310
١	Oxygen difluoride	124	2190	Pentanes	128	1265
1	Oxygen difluoride, compressed	124	2190	1-Pentene	127	1108
	Oxygen generators, small	140	8037	1-Pentol	153P	2705
	Paint (corrosive)	154	1760	Peracetic acid, solution	147	2131
	Paint (corrosive)	153	3066	Percarbonates, inorganic, n.o.s.	140	3217
	Paint (flammable)	127	1263	Perchlorate, n.o.s.	140	1481
9	Paint related material (corrosive)	154	1760	Perchlorates, inorganic, aqueous solution, n.o.s.	140	3211
ı	Paint related material	153	3066	Perchlorates, inorganic, n.o.s.	140	1481
	(corrosive)			Perchloric acid, with more than	143	1873
	Paint related material (flammable)	127	1263	50% but not more than 72% acid		
	Paper, unsaturated oil treated	133	1379	Perchloric acid, with not more	140	1802
	Paraformaldehyde	133	2213	than 50% acid	160	1907
	0 - 444		1	Perchloroethylene	160	1897
	Page 144					

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Perchloromethyl mercaptan	157	1670	Pesticide, water-reactive	135	2210
Perchloryl fluoride	124	3083	Petrol	128	1203
Perfluoroethyl vinyl ether	115	3154	Petroleum crude oil	128	1267
Perfluoro(ethylvinyl ether)	115	3154	Petroleum distillates, n.o.s.	128	1268
Perfluoromethyl vinyl ether	115	3153	Petroleum ether	128	1271
Perfluoro(methylvinyl ether)	115	3153	Petroleum gases, liquefied	115	1075
Perfumery products, with flammable solvents	127	1266	Petroleum naphtha Petroleum oil	128 128	1255 1270
Permanganate, n.o.s.	140	1482	Petroleum products, n.o.s.	128	1268
Permanganates, inorganic,	140	3214	Petroleum spirit	128	1271
aqueous solution, n.o.s.		-	Phenacyl bromide	153	2645
Permanganates, inorganic, n.o.s.	140	1482	Phenetidines	153	2311
Peroxides, inorganic, n.o.s.	140	1483	Phenol, liquid	153	2821
Peroxyacetic acid, solution	147	2131	Phenol, molten	153	2312
Persulfates, inorganic, aqueous		3216	Phenol, solid	153	1671
solution, n.o.s.			Phenol solution	153	2821
Persulfates, inorganic, n.o.s.	140	3215	Phenolates, liquid	154	2904
Persulphates, inorganic,	140	3216	Phenolates, solid	154	2905
aqueous solution, n.o.s.			Phenolsulfonic acid, liquid	153	1803
Persulphates, inorganic, n.o.s.	140	3215	Phenolsulphonic acid, liquid	153	1803
Pesticide, liquid, flammable, poisonous	131	3021	Phenoxy pesticide, liquid, flammable, poisonous	131	2766
Pesticide, liquid, flammable, toxic	131	3021	Phenoxy pesticide, liquid, flammable, toxic	131	2766
Pesticide, liquid, poisonous, flammable, n.o.s.	131	2903	Phenoxy pesticide, liquid,	152	3000
Pesticide, liquid, poisonous, n.o.s.	151	2902	Phenoxy pesticide, liquid, poisonous, flammable	131	2999
Pesticide, liquid, toxic, flammable, n.o.s.	131	2903	Phenoxy pesticide, liquid, toxic		3000
Pesticide, liquid, toxic, n.o.s.	151	2902	Phenoxy pesticide, liquid, toxic flammable	, 131	2999
Pesticide, solid, poisonous	151	2588	Phenoxy pesticide, solid,	152	2765
Pesticide, solid, poisonous,	151	2588	poisonous		
n.o.s.  Pesticide, solid, toxic, n.o.s.	151	2588	Phenoxy pesticide, solid, toxic	152	2765
Name and Address of the Owner, where the Owner, which is the O	THE REAL PROPERTY.	100	The state of the s	Pa	age 145

	Name of Material	Guide No.		Name of Material	Guide No.		
	Phenylacetonitrile, liquid	152	2470	9-Phosphabicyclononanes	135	2940	١
	Phenylacetyl chloride	156	2577	Phosphine	119	2199	ı
	Phenylcarbylamine chloride	151	1672	Phosphoric acid	154	1805	ı
	Phenyl chloroformate	156	2746	Phosphoric anhydride	137	1807	ı
	Phenyldichloroarsine	152	1556	Phosphorous acid	154	2834	ı
	Phenylenediamines	153	1673	Phosphorous acid, ortho	154	2834	ı
	Phenylhydrazine	153	2572	Phosphorus, amorphous	133	1338	ı
	Phenyl isocyanate	155	2487	Phosphorus, amorphous, red	133	1338	ı
	Phenyl mercaptan	131	2337	Phosphorus, white, dry or under	136	1381	ı
	Phenylmercuric acetate	151	1674	water or in solution			ı
	Phenylmercuric compound,	151	2026	Phosphorus, white, molten	136	2447	ı
	n.o.s.		tet i	Phosphorus, yellow, dry or unde water or in solution	er 136	1381	ı
	Phenylmercuric hydroxide	151	1894	Phosphorus heptasulfide, free	139	1339	ı
	Phenylmercuric nitrate	151	1895	from yellow and white	100	1000	ı
	Phenylphosphorus dichloride	137	2798	Phosphorus			ı
	Phenylphosphorus thiodichloride	137	2799	Phosphorus heptasulphide, free from yellow and white	139	1339	ı
	Phenyltrichlorosilane	156	1804	Phosphorus			ı
	Phenyl urea pesticide, liquid,	131	2768	Phosphorus oxybromide	137	1939	į
	flammable, poisonous			Phosphorus oxybromide, molter	137	2576	l
	Phenyl urea pesticide, liquid, flammable, toxic	131	2768	Phosphorus oxybromide, solid	137	1939	
1	Phenyl urea pesticide, liquid,	151	3002	Phosphorus oxychloride	137	1810	ı
Ì	poisonous			Phosphorus pentabromide	137	2691	ı
	Phenyl urea pesticide, liquid,	131	3001	Phosphorus pentachloride	137	1806	ı
	poisonous, flammable		300	Phosphorus pentafluoride	125	2198	ı
	Phenyl urea pesticide, liquid, toxic	151	3002	Phosphorus pentafluoride, compressed	125	2198	
	Phenyl urea pesticide, liquid, toxic, flammable	131	3001	Phosphorus pentasulfide, free from yellow and white	139	1340	l
	Phenyl urea pesticide, solid,	151	2767	Phosphorus			
	poisonous			Phosphorus pentasulphide, free	139	1340	
	Phenyl urea pesticide, solid, toxic	151	2767	from yellow and white Phosphorus			
	Phosgene	125	1076	Phosphorus pentoxide	137	1807	
				The second secon			

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Phosphorus sesquisulfide, free	139	1341	Picrite, wetted	113	1336
from yellow and white Phosphorus			Pinane hydroperoxide	147	2162
Phosphorus sesquisulphide,	139	1341	alpha-Pinene	127	2368
free from yellow and white	100	1041	Pinene (alpha)	127	2368
Phosphorus			Pine oil	129	1272
Phosphorus tribromide	137	1808	Piperazine	153	2579
Phosphorus trichloride	137	1809	Piperidine	132	2401
Phosphorus trioxide	157	2578	Plastic, nitrocellulose-based,	135	2006
Phosphorus trisulfide, free from yellow and white Phosphorus	139	1343	spontaneously combustible, n.o.s.		
Phosphorus trisulphide, free	139	1343	Plastic molding material	171	
from yellow and white Phosphorus			Plastic moulding compound	171	3314
Phthalic anhydride	156	2214	Plastics, nitrocellulose-based, self-heating, n.o.s.	135	2006
Phthalimide derivative	131	2774	Poison B, liquid, n.o.s.	153	2810
pesticide, liquid, flammable, poisonous			Poison B, solid, n.o.s.	154	2811
Phthalimide derivative pesticide, liquid, flammable,	131	2774	Poisonous gas, flammable, n.o.s.	119	1953
toxic			Poisonous gas, n.o.s.	123	1955
Phthalimide derivative pesticide, liquid, poisonous	151	3008	Poisonous liquid, corrosive, inorganic, n.o.s.	154	3289
Phthalimide derivative pesticide, liquid, poisonous, flammable	131	3007	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	154	3289
Phthalimide derivative pesticide, liquid, toxic	151	3008	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	154	3289
Phthalimide derivative pesticide, liquid, toxic, flammable	131	3007	Poisonous liquid, corrosive, n.o.s.	154	2927
Phthalimide derivative pesticide, solid, poisonous	151	2773	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)	154	2927
Phthalimide derivative pesticide, solid, toxic	151	2773	Poisonous liquid, corrosive,	154	2927
Picolines	130	2313	n.o.s. (Inhalation Hazard Zone B)		
Picric acid, wet, with not less than 10% water	113	1344	Poisonous liquid, flammable, n.o.s.	119	1953

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Poisonous liquid, flammable, n.o.s.	131	2929	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	142	3122
Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	131	2929	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard	142	3122
Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	131	2929	Zone B)  Poisonous liquid, water- reactive, n.o.s.	139	3123
Poisonous liquid, flammable, organic, n.o.s.	131	2929	Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone A)	139	3123
Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	131	2929	Poisonous liquid, water- reactive, n.o.s. (Inhalation	139	3123
Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	131	2929	Hazard Zone B)  Poisonous liquid, which in contact with water emits	139	3123
Poisonous liquid, inorganic, n.o.s.	151	3287	flammable gases, n.o.s.  Poisonous liquid, which in	139	3123
Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	151	3287	contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)		
Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	151	3287	Poisonous liquid, which in contact with water emits flammable gases, n.o.s.	139	3123
Poisonous liquid, n.o.s.	123	1955	(Inhalation Hazard Zone B) Poisonous solid, corrosive,	154	3290
Poisonous liquid, n.o.s.	153	2810	inorganic, n.o.s.		
Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)	153	2810	Poisonous solid, corrosive, n.o.s.	154	2928
Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)	153	2810	Poisonous solid, flammable, n.o.s.	134	2930
Poisonous liquid, organic, n.o.	s. <b>153</b>	2810	Poisonous solid, flammable,	134	2930
Poisonous liquid, organic, n.o. (Inhalation Hazard Zone A)	s. <b>153</b>	2810	organic, n.o.s.	454	2000
Poisonous liquid, organic, n.o.	s. <b>153</b>	2810	Poisonous solid, inorganic, n.o.s.	151	3288
(Inhalation Hazard Zone B)			Poisonous solid, n.o.s.	154	2811
Poisonous liquid, oxidizing, n.o.s.	142	3122	Poisonous solid, organic, n.o.s	. 154	2811
11.0.3.			Poisonous solid, oxidizing, n.o.s.	141	3086

Name of Material (	Suide No.		Name of Material	Guide No.	ID No.
Poisonous solid, self-heating,	136	3124	Potassium, metal liquid alloy	138	1420
n.o.s.			Potassium arsenate	151	1677
Poisonous solid, water-reactive, n.o.s.	139	3125	Potassium arsenite	154	1678
Poisonous solid, which in	139	3125	Potassium bifluoride	154	1811
contact with water emits	133	3123	Potassium bisulfite solution	154	2693
flammable gases, n.o.s.			Potassium bisulphite solution	154	2693
Polyalkylamines, n.o.s.	132	2733	Potassium borohydride	138	1870
Polyalkylamines, n.o.s.	132	2734	Potassium bromate	140	1484
Polyalkylamines, n.o.s.	153	2735	Potassium chlorate	140	1485
Polyamines, flammable, corrosive, n.o.s.	132	2733	Potassium chlorate, aqueous solution	140	2427
Polyamines, liquid, corrosive,	132	2734	Potassium chlorate, solution	140	2427
flammable, n.o.s.	1,5,7		Potassium chromate	171	9142
Polyamines, liquid, corrosive, n.o.s.	153	2735	Potassium cuprocyanide	157	1679
Polyamines, solid, corrosive,	154	3259	Potassium cyanide	157	1680
n.o.s.			Potassium dichloro-s- triazinetrione, dry	141	2465
Polychlorinated biphenyls	171	2315	Potassium dithionite	135	1929
Polyester resin kit	146	2255	Potassium fluoride	154	1812
Polyester resin kit	127	3269	Potassium fluoroacetate	151	2628
Polyhalogenated biphenyls,	171	3151	Potassium fluorosilicate	151	2655
liquid	474	0450	Potassium hydrogendifluoride	154	1811
Polyhalogenated biphenyls, solid	171	3152	Potassium hydrogen fluoride,	154	1811
Polyhalogenated terphenyls,	171	3151	solution	134	1011
liquid	-0.174		Potassium hydrogen sulfate	154	2509
Polyhalogenated terphenyls,	171	3152	Potassium hydrogen sulphate	154	2509
solid			Potassium hydrosulfite	135	1929
Polymeric beads, expandable	133	2211	Potassium hydrosulphite	135	1929
Polymerizable material, stabilized with dry ice	171P	-	Potassium hydroxide, dry, solid	154	1813
Polystyrene beads, expandable	133	2211	Potassium hydroxide, flake	154	1813
Potassium	138	2257	Potassium hydroxide, solid	154	1813
Potassium, metal	138	2257	Potassium hydroxide, solution	154	1814
Potassium, metal alloys	138	1420	Potassium metavanadate	151	2864
the second second second second			The second secon		

Name of Material	Suide No.		Name of Material	Guide No.	
Potassium monoxide	154	2033	Potassium sulphide, with less	135	1382
Potassium nitrate	140	1486	than 30% water of crystallization		
Potassium nitrate and Sodium nitrate mixture	140	1499	Potassium sulphide, with less than 30% water of hydration	135	1382
Potassium nitrate and Sodium nitrite mixture	140	1487	Potassium superoxide	143	2466
Potassium nitrite	140	1488	Printing ink, flammable	129	1210
Potassium perchlorate	140	1489	Propadiene, inhibited	116P	2200
Potassium permanganate	140	1490	Propadiene and	116P	1060
Potassium peroxide	144	1491	Methylacetylene mixture, stabilized		
Potassium persulfate	140	1492	Propane	115	1075
Potassium persulphate	140	1492	Propane	115	1978
Potassium phosphide	139	2012	Propane-Ethane mixture,	115	1961
Potassium selenate	151	2630	refrigerated liquid		
Potassium selenite	151	2630	Propane mixture	115	1075
Potassium silicofluoride	151	2655	Propane mixture	115	1978
Potassium sodium alloys	138	1422	Propanethiols	130	2402
Potassium sulfide, anhydrous	135	1382	n-Propanol	129	1274
Potassium sulfide, hydrated,	153	1847	Propargyl alcohol	131	1986
with not less than 30% water of crystallization			Propionaldehyde	129	1275
Potassium sulfide, hydrated,	153	1847	Propionic acid	132	1848
with not less than 30% water		1011	Propionic anhydride	156	2496
of hydration		-	Propionitrile	131	2404
Potassium sulfide, with less than	135	1382	Propionyl chloride	132	1815
30% water of crystallization	125	1382	Propionyl peroxide	148	2132
Potassium sulfide, with less than 30% water of hydration	1 135	1362	n-Propyl acetate normal Propyl alcohol	129 129	1276 1274
Potassium sulphide, anhydrous	135	1382		129	1274
Potassium sulphide, hydrated,	153	1847	Propylamina	132	1274
with not less than 30% water of crystallization		1	Propylamine n-Propyl benzene	132	2364
Potassium sulphide, hydrated,	153	1847	Propyl chloride	129	1278
with not less than 30% water		-17	n-Propyl chloroformate	155	2740
of hydration		-	Propylene	115	1075

Name of Material	euide No.	No.	Name of Material	Guide No.	
Propylene	115	1077	Pyrosulfuryl chloride	137	1817
Propylene, Ethylene and	116	3138	Pyrosulphutyl chloride	137	1817
Acetylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with			Pyroxylin plastic, rod, sheet, roll, tube or scrap	133	1325
not more than 22.5%			Pyrrolidine	132	1922
Acetylene and not more than 6% Propylene.		5.0	Quinoline	154	2656
Propylene chlorohydrin	131	2611	Radioactive material, articles	161	2909
1,2-Propylenediamine	132	2258	manufactured from depleted Uranium		70
1,3-Propylenediamine	132	2258	Radioactive material, articles	161	2909
Propylene dichloride	130	1279	manufactured from natural		2000
Propyleneimine, inhibited		1921	Thorium		
Propylene oxide		1280	Radioactive material, articles manufactured from natural	161	2909
Propylene oxide and Ethylene		2983	Uranium		-
oxide mixture, with not more than 30% Ethylene oxide	1297	2903	Radioactive material, empty packages	161	2908
Propylene tetramer	128	2850	Radioactive material, excepted	161	2910
Propyl formates	129	1281	package, articles manufactured from depleted		41.0
n-Propyl isocyanate	155	2482	Uranium		
Propyl mercaptan	130	2402	Radioactive material, excepted	161	2910
n-Propyl nitrate	131	1865	package, articles		
Propyltrichlorosilane	155	1816	manufactured from natural Thorium		100
Pyridine	129	1282	Radioactive material, excepted	161	2910
Pyrophoric alloy, n.o.s.	135	1383	package, articles		
Pyrophoric liquid, inorganic, n.o.s.	135	3194	manufactured from natural Uranium		
Pyrophoric liquid, n.o.s.	135	2845	Radioactive material, excepted	161	2910
Pyrophoric liquid, organic, n.o.s	135	2845	package, empty packaging	161	2910
Pyrophoric metal, n.o.s.	135	1383	Radioactive material, excepted package, instruments or	101	2910
Pyrophoric organometallic compound, n.o.s.	135	3203	articles	161	2910
Pyrophoric solid, inorganic, n.o.s.	135	3200	Radioactive material, excepted package, limited quantity of material	101	2310
Pyrophoric solid, n.o.s.	135	2846	Radioactive material, fissile,	165	2918
Pyrophoric solid, organic, n.o.s.	135	2846	n.o.s.		ae 151

	Name of Material - G	ouide No.		Name of Material	Guide No.	
	Radioactive material,	161	2911	Refrigerant gas R-12B1	126	1974
	instruments and articles			Refrigerant gas R-13	126	1022
	Radioactive material, limited quantity, n.o.s.	161	2910	Refrigerant gas R-13 and Refrigerant gas R-23	126	2599
	Radioactive material, low specific activity (LSA), n.o.s.	162	2912	azeotropic mixture with 60% Refrigerant gas R-13		
	Radioactive material, n.o.s.	163	2982	Refrigerant gas R-13B1	126	1009
	Radioactive material, special form, n.o.s.	164	2974	Refrigerant gas R-14, compressed	126	1982
	Radioactive material, surface	162	2913	Refrigerant gas R-21	126	1029
	contaminated objects (SCO)	10		Refrigerant gas R-22	126	1018
	Radioactive material, Uranium hexafluoride, fissile	166	2977	Refrigerant gas R-23	126	1984
	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted	166	2978	Refrigerant gas R-23 and Refrigerant gas R-13 azeotropic mixture with 60% Refrigerant gas R-13	126	2599
	Rags, oily	133	1856	Refrigerant gas R-32	115	3252
	Rare gases and Nitrogen mixture	121	1981	Refrigerant gas R-40	115	1063
	Rare gases and Nitrogen mixture, compressed	121	1981	Refrigerant gas R-41	115	2454
	Rare gases and Oxygen mixture	122	1980	Refrigerant gas R-114	126	1958
	Rare gases and Oxygen mixture, compressed		1980	Refrigerant gas R-115 Refrigerant gas R-116,	126 126	<ul><li>1020</li><li>2193</li></ul>
	Rare gases mixture	121	1979	compressed		
	Rare gases mixture, compressed		1979	Refrigerant gas R-124	126	1021
	Receptacles, small, containing	115	2037	Refrigerant gas R-125	126	3220
	gas		1 -	Refrigerant gas R-133a	126	1983
	Red phosphorus	133	1338	Refrigerant gas R-134a	126	3159
	Red phosphorus, amorphous	133	1338	Refrigerant gas R-143a	115	2035
	Refrigerant gas, n.o.s.	126	1078	Refrigerant gas R-142b	115	2517
	Refrigerant gas, n.o.s. (flammable)	115	1954	Refrigerant gas R-152a Refrigerant gas R-152a and	115 126	1030 2602
	Refrigerant gas R-12	126	1028	Refrigerant gas R-12		
	Refrigerant gas R-12 and Refrigerant gas R-152a	126	2602	azeotropic mixture with 74% Refrigerant gas R-12		
	azeotropic mixture with 74%		4	Refrigerant gas R-161	115	2453
	Refrigerant gas R-12			Refrigerant gas R-218	126	2424
3	NAME OF TAXABLE PARTY OF TAXABLE PARTY.	Witness or Williams	STREET, SQUARE, SQUARE,	THE RESERVE OF THE PARTY OF THE	Name and Address of the Owner, where	The Real Property lies, the last

Name of Material	No.		Name of Material	Guide No.	-
Refrigerant gas R-227 Refrigerant gas R-500 (azeotropic mixture of Refrigerant gas R-12 and	126 126	3296 2602	Refrigerating machines, containing non-flammable, non-poisonous, non- corrosive, liquefied gas	126	2857
Refrigerant gas R-152a with approximately 74% Refrigerant gas R-12)			Refrigerating machines, containing non-flammable, non-toxic, liquefied gas	126	2857
Refrigerant gas R-502 Refrigerant gas R-503 (azeotropic mixture of Refrigerant gas R-13 and	126 126	1973 2599	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	126	2857
Refrigerant gas R-23 with approximately 60% Refrigerant gas R-13)			Regulated medical waste, n.o.s. Regulated medical waste	158 158	3291 9275
Refrigerant gas R-1216	126	1858	Resin solution Resorcinol	127 153	1866 2876
Refrigerant gas R-1132a		1959	Rosin oil	127	1286
Refrigerant gas R-1318	126	2422	Rubber scrap, powdered or	133	1345
Refrigerant gas RC-318	126	1976	granulated	Halan	
Refrigerating machine	128	1993	Rubber shoddy, powdered or	133	1345
Refrigerating machines	115	8023	granulated		
Refrigerating machines, containing Ammonia solutions	126	2857	Rubber solution Rubidium	127	1287 1423
(UN2073)			Rubidium hydroxide	154	2678
Refrigerating machines,	126	2857	Rubidium hydroxide, solid	154	2678
containing Ammonia solutions (UN2672)			Rubidium hydroxide, solution	154	2677
Refrigerating machines,	115	1954	Rubidium metal	138	1423
containing flammable,			Seat-belt modules	171	3268
liquefied gas	115	1954	Seat-belt pre-tensioners	171	3268
Refrigerating machines, containing flammable, non- poisonous, non-corrosive, liquefied gas	113	1954	Seed cake, with more than 1.5% oil and not more than 11% moisture	135	1386
Refrigerating machines, containing non-flammable, liquefied gas	126	2857	Seed cake, with not more than 1.5% oil and not more than 11% moisture	135	2217
Refrigerating machines,	126	2857	Selenates	151	2630
containing non-flammable, non-poisonous, liquefied gas			Selenic acid	154	1905
non-poisonous, nquened gas			Selenites	151	2630

Name of Material	Guide No.	No.	Name of Material	Guide No.	No.
Selenium compound, n.o.s.	151	3283	Self-heating solid, organic,	136	3128
Selenium disulfide	153	2657	poisonous, n.o.s.		
Selenium disulphide	153	2657	Self-heating solid, organic, toxic, n.o.s.	136	3128
Selenium hexafluoride	125	2194	Self-heating solid, oxidizing,	135	3127
Selenium oxide	154	2811	n.o.s.	133	3121
Selenium oxychloride	157	2879	Self-heating solid, poisonous,	136	3191
Selenium powder	152	2658	inorganic, n.o.s.		
Self-heating liquid, corrosive, inorganic, n.o.s.	136	3188	Self-heating solid, poisonous, organic, n.o.s.	136	3128
Self-heating liquid, corrosive, organic, n.o.s.	136	3185	Self-heating solid, toxic, inorganic, n.o.s.	136	3191
Self-heating liquid, inorganic, n.o.s.	135	3186	Self-heating solid, toxic, organic, n.o.s.	136	3128
Self-heating liquid, organic, n.o.s.	135	3183	Self-heating substance, solid, corrosive, n.o.s.	136	3126
Self-heating liquid, poisonous, inorganic, n.o.s.	136	3187	Self-heating substances, solid, n.o.s.	135	3088
Self-heating liquid, poisonous, organic, n.o.s.	136	3184	Self-heating substances, solid, oxidizing, n.o.s.	135	3127
Self-heating liquid, toxic, inorganic, n.o.s.	136	3187	Self-heating substances, solid, poisonous, n.o.s.	136	3128
Self-heating liquid, toxic, organic, n.o.s.	136	3184	Self-heating substances, solid, toxic, n.o.s.	136	3128
Self-heating metal powders,	135	3189	Self-reactive liquid type B	149	3221
n.o.s. Self-heating solid, corrosive,	136	3192	Self-reactive liquid type B, temperature controlled	150	3231
inorganic, n.o.s.		100	Self-reactive liquid type C	149	3223
Self-heating solid, corrosive, organic, n.o.s.	136	3126	Self-reactive liquid type C, temperature controlled	150	3233
Self-heating solid, inorganic, n.o.s.	135	3190	Self-reactive liquid type D	149	3225
Self-heating solid, inorganic, poisonous, n.o.s.	136	3191	Self-reactive liquid type D, temperature controlled	150	3235
Self-heating solid, inorganic,	136	3191	Self-reactive liquid type E	149	3227
toxic, n.o.s.			Self-reactive liquid type E, temperature controlled	150	3237
Self-heating solid, organic, n.o.s.	135	3088	Self-reactive liquid type F	149	3229

Name of Material	Guide No.		Name of Material (	Suide No.	
Self-reactive liquid type F,	150	3239	Sludge acid	153	1906
temperature controlled	1		Smokeless powder for small	133	1325
Self-reactive solid type B	149	3222	arms		
Self-reactive solid type B, temperature controlled	150	3232	Smokeless powder for small arms	133	3178
Self-reactive solid type C	149	3224	Soda lime, with more than 4%	154	1907
Self-reactive solid type C, temperature controlled	150	3234	Sodium hydroxide Sodium	138	1428
Self-reactive solid type D	149	3226	Sodium aluminate, solid	154	2812
Self-reactive solid type D,	150	3236	Sodium aluminate, solution	154	1819
temperature controlled			Sodium aluminum hydride	138	2835
Self-reactive solid type E	149	3228	Sodium ammonium vanadate	154	2863
Self-reactive solid type E, temperature controlled	150	3238	Sodium arsanilate	154	2473
Self-reactive solid type F	149	3230	Sodium arsenate	151	1685
Self-reactive solid type F,	150	3240	Sodium arsenite, aqueous	154	1686
temperature controlled	130	3240	solution		
Self-reactive substances,	149	3031	Sodium arsenite, solid	151	2027
samples, n.o.s.			Sodium azide	153	1687
Self-reactive substances, trial	149	3032	Sodium bifluoride, solid	154	2439
quantities, n.o.s.			Sodium bifluoride, solution	154	2439
Shale oil	128	1288	Sodium bisulfate, solid	154	1821
Silane	116	2203	Sodium bisulfate, solution	154	2837
Silicofluorides, n.o.s.	151	2856	Sodium bisulphate, solid	154	1821
Silane, compressed	116	2203	Sodium bisulphate, solution	154	2837
Silicon powder, amorphous	170	1346	Sodium borohydride	138	1426
Silicon tetrachloride	156	1818	Sodium borohydride and Sodium hydroxide solution, with not	157	3320
Silicon tetrafluoride	125	1859	more than 12% Sodium		
Silicon tetrafluoride, compressed	125	1859	borohydride and not more than 40% Sodium hydroxide		
Silver arsenite	151	1683	Sodium bromate	141	1494
Silver cyanide	151	1684	Sodium cacodylate	152	1688
Silver nitrate	140	1493	Sodium chlorate	140	1495
Silver picrate, wetted with not less than 30% water	113	1347	Sodium chlorate, aqueous solution	140	2428

Name of Material G	uide No.	ID No.	Name of Material G	uide No.	No.
Sodium chlorite	143	1496	Sodium hydride	138	1427
Sodium chlorite, solution, with	154	1908	Sodium hydrogendifluoride	154	2439
more than 5% available Chlorine		Ter ,	Sodium hydrogen fluoride	154	2439
Sodium chloroacetate	151	2659	Sodium hydrogen sulfate, solid	154	1821
Sodium chromate	171	9145	Sodium hydrogen sulfate,	154	2837
Sodium cuprocyanide, solid	157	2316	solution Sodium hydrogen sulphate, solid	154	1821
Sodium cuprocyanide, solution	157	2317	Sodium hydrogen sulphate, solid Sodium hydrogen sulphate,	154	2837
Sodium cyanide	157	1689	solution	134	2001
Sodium 2-diazo-1-naphthol-4-	149	3040	Sodium hydrosulfide, solid	154	2923
sulfonate Sodium 2-diazo-1-naphthol-4-	149	3040	Sodium hydrosulfide, solid, with less than 25% water of	135	2318
sulphonate			crystallization	1	Hotel
Sodium 2-diazo-1-naphthol-5- sulfonate	149	3041	Sodium hydrosulfide, solution	154	2922
Sodium 2-diazo-1-naphthol-5- sulphonate	149	3041	Sodium hydrosulfide, with less than 25% water of crystallization	135	2318
Sodium dichloroisocyanurate	141	2465	Sodium hydrosulfide, with not	154	2949
Sodium dichloro-s-triazinetrione	141	2465	less than 25% water of crystallization		
Sodium dinitro-o-cresolate, wetted with not less than 15%	113	1348	Sodium hydrosulfite	135	1384
water		1112	Sodium hydrosulphide, solid	154	2923
Sodium dinitro-ortho-cresolate, wetted	113	1348	Sodium hydrosulphide, solid, with less than 25% water of	135	2318
Sodium dithionite	135	1384	crystallization	45.	0000
Sodium	171	9146	Sodium hydrosulphide, solution	154	2922
dodecylbenzenesulfonate (branched chain)		44	Sodium hydrosulphide, with less than 25% water of	135	2318
Sodium dodecylbenzenesulphonate (branched chain)	171	9146	crystallization Sodium hydrosulphide, with not less than 25% water of	154	2949
Sodium fluoride	154	1690	crystallization		
Sodium fluoride, solid	154	1690	Sodium hydrosulphite	135	1384
Sodium fluoride, solution	154	1690	Sodium hydroxide, dry	154	1823
Sodium fluoroacetate	151	2629	Sodium hydroxide, bead	154	1823
Sodium fluorosilicate	154	2674	Sodium hydroxide, flake	154	1823

Name of Material	Guide No.	No.	Name of Material	uide No.	ID No.
Sodium hydroxide, granular	154	1823	Sodium silicofluoride	154	2674
Sodium hydroxide, solid	154	1823	Sodium sulfide, anhydrous	135	1385
Sodium hydroxide, solution	154	1824	Sodium sulfide, hydrated, with not less than 30% water	153	1849
Sodium methylate Sodium methylate, alcohol mixture	138	1431 1289	Sodium sulfide, with less than 30% water of crystallization	135	1385
Sodium methylate, dry	138	1431	Sodium sulphide, anhydrous	135	1385
Sodium methylate, solution in alcohol	132	1289	Sodium sulphide, hydrated, with not less than 30% water	153	1849
Sodium monoxide	157	1825	Sodium sulphide, with less than 30% water of crystallization	135	1385
Sodium nitrate	140	1498	Sodium superoxide	143	2547
Sodium nitrate and Potassium nitrate mixture	140	1499	Solids containing corrosive liquid, n.o.s.	154	3244
Sodium nitrite	140	1500	Solids containing flammable	133	3175
Sodium nitrite and Potassium nitrate mixtures	140	1487	liquid, n.o.s.		
Sodium nitrite mixture	140	1487	Solids containing poisonous liquid, n.o.s.	151	3243
Sodium pentachlorophenate	154	2567	Solids containing toxic liquid,	151	3243
Sodium percarbonates	140	2467	n.o.s.		
Sodium perchlorate	140	1502	Spirits of Nitroglycerin, not exceeding 1 % Nitroglycerin	127	1204
Sodium permanganate	140	1503	Stannic chloride, anhydrous	137	1827
Sodium peroxide	144	1504	Stannic chloride, pentahydrate	154	2440
Sodium peroxoborate, anhydrous	140	3247		139	1433
Sodium persulfate	140	1505	Stannous chloride, solid	154	1759
Sodium persulphate	140	1505	Steel swarf	170	2793
Sodium phenolate, solid	153	2497	Stibine	119	2676
Sodium phosphate, dibasic	171	9147	Straw, wet, damp or	133	1327
Sodium phosphate, tribasic	171	9148	contaminated with oil		
Sodium phosphide	139	1432	Strontium arsenite	151	1691
Sodium picramate, wetted with		1349	Strontium chlorate	143	1506
not less than 20% water			Strontium chlorate, solid	143	1506
Sodium potassium alloys	138	1422	Strontium chlorate, solution	143	1506
Sodium selenite	151	2630	Strontium chromate	171	9149

Name of Material	Guide No.		Name of Material	Guide No.	
Strontium nitrate	140	1507	Substances, which in contact with water emit flammable	138	3135
Strontium perchlorate	140	1508	gases, solid, self-heating,		
Strontium peroxide	143	1509	n.o.s.		
Strontium phosphide	139	2013	Substances, which in contact	139	3134
Strychnine	151	1692	with water emit flammable gases, solid, toxic, n.o.s.		
Strychnine salts	151	1692		131	2780
Styrene monomer, inhibited	128P	2055	Substituted nitrophenol pesticide, liquid, flammable,		2100
Substances, which in contact	138	3129	poisonous		
with water emit flammable gases, liquid, corrosive, n.o.	s.		Substituted nitrophenol	131	2780
Substances, which in contact	138	3148	pesticide, liquid, flammable, toxic		
with water emit flammable			Substituted nitrophenol	153	3014
gases, liquid, n.o.s.			pesticide, liquid, poisonous	Harris	
Substances, which in contact with water emit flammable gases, liquid, poisonous, n.o.s.	139	3130	Substituted nitrophenol pesticide, liquid, poisonous, flammable	131	3013
Substances, which in contact with water emit flammable	139	3130	Substituted nitrophenol pesticide, liquid, toxic	153	3014
gases, liquid, toxic, n.o.s. Substances, which in contact	138	3131	Substituted nitrophenol pesticide, liquid, toxic,	131	3013
with water emit flammable			flammable	153	2779
gases, solid, corrosive, n.o.s		0400	Substituted nitrophenol pesticide, solid, poisonous	100	2119
Substances, which in contact with water emit flammable gases, solid, flammable,	138	3132	Substituted nitrophenol pesticide, solid, toxic	153	2779
n.o.s.			Succinic acid peroxide	146	2135
Substances, which in contact	138	2813	Sulfamic acid	154	2967
with water emit flammable gases, solid, n.o.s.			Sulfur	133	1350
Substances, which in contact	138	3133	Sulfur, molten	133	2448
with water emit flammable		0100	Sulfur chlorides	137	1828
gases, solid, oxidizing, n.o.s	., .		Sulfur dioxide	125	1079
Substances, which in contact with water emit flammable	139	3134	Sulfur dioxide, liquefied	125	1079
gases, solid, poisonous,			Sulfur hexafluoride	126	1080
n.o.s.			Sulfuric acid	137	1830
State of the last			Sulfuric acid, fuming	137	1831

Sulfuric acid, furning, with less than 30% free Sulfur trioxide   137   1831   1831   1832   137   1832   13831   13832   13831   13832   13831   13832   13832   138333   138333   13833   13833   13833   13833   13833   13833   13833   13833   13833   13833   13833	Name of Material	Guide		Name of Material (	uide	
than 30% free Sulfur trioxide           Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide         137         1831         51% acid         Sulphuric acid, with not more than 51% acid         157         2796         157         1786         Sulphuric acid, with not more than 51% acid         Sulfuric acid, with not more than 51% acid         Sulfuric acid, with not more than 51% acid         Sulphuric acid and Hydrofluoric acid mixtures         157         1786         Sulphur cacid and Hydrofluoric acid mixtures         157         1786         Sulphur cacid and Hydrofluoric acid mixtures         157         1786         Sulphur tetrafluoride         125         2418         Sulphur trioxide         137         1829         Sulphur trioxide, inhibited         137         1829         Sulphur trioxide, inhibited         137         1829         Sulphur trioxide, stabilized         137         1829         Sulphur trioxide, inhibited         137         1829         Sulphur trioxide, inhibited         137         1829         Sulphur trioxide, inhibited         137         1829         Sulphur trioxide, stabilized         137         1829         Sulphur trioxide and Chlorosulphonic acid mixture         137         1829         Sulphuryl chloride         137         1829         Sulphuryl fluoride         137         1830         Sulphuryl fluoride         137         1834         Sulphuryl fluoride	Next the second	No.	No.			No.
Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide		137	1831		137	1832
Sulfuric acid, spent   137   1832   Sulfuric acid, with more than   137   1830   Sulfuric acid, with not more than   137   1830   Sulfuric acid, with not more than   157   2796   51% acid   Sulfuric acid and Hydrofluoric   acid mixtures   Sulfur acid and Hydrofluoric   acid mixtures   Sulfur tetrafluoride   157   1786   Sulfur tetrafluoride   157   1786   Sulfur tetrafluoride   157   1786   Sulfur tetrafluoride   137   1829   Sulfur trioxide   137   1829   Sulfur trioxide, inhibited   137   1829   Sulfur trioxide, stabilized   137   1829   Sulfur trioxide, stabilized   137   1829   Sulfur trioxide, stabilized   137   1829   Sulfur trioxide, uninhibited   137   1829   Sulfur trioxide and   137   1754   Chlorosulfonic acid mixture   Sulfuryl chloride   137   1834   Sulfuryl chloride   137   1834   Sulfuryl fluoride   137   1834   Sulfuryl fluoride   138   1350   Sulphur molten   133   1350   Sulphur chlorides   137   1828   Sulphur chlorides   137   1828   Sulphur dioxide   125   1079   Sulphur dioxide   125   1079   Sulphur dioxide   126   1080   Sulphur cacid   137   1830   Sulphuric acid fuming   137   1831   Sulphuric acid, fuming   137   1831   Sulphuric acid, fuming   137   1831   than 30% free Sulphur trioxide   137   1831   tess than 30% free Sulphur trioxide   137   1831   than 30		137	1831		137	1830
Sulfuric acid, with more than 51% acid					157	2796
Sulfuric acid, with not more than 51% acid	Sulfuric acid, spent	137	1832	Sulphuric acid and Hydrofluoric	157	1786
Sulfuric acid, with not more than 517 2796 51% acid  Sulfuric acid and Hydrofluoric acid mixtures  Sulfurous acid 154 1833  Sulfur tetrafluoride 125 2418  Sulfur trioxide 137 1829  Sulfur trioxide, inhibited 137 1829  Sulfur trioxide, inhibited 137 1829  Sulfur trioxide, inhibited 137 1829  Sulfur trioxide, uninhibited 137 1829  Sulfur trioxide, uninhibited 137 1829  Sulfur trioxide, uninhibited 137 1829  Sulfur trioxide and 137 1754  Chlorosulfonic acid mixture  Sulfuryl chloride 137 1834  Sulfuryl fluoride 123 2191  Sulphur divide 125 1079  Sulphur hexafluoride 125 1079  Sulphur hexafluoride 126 1080  Sulphur divide, liquefied 127 1079  Sulphur divide, liquefied 128 1079  Sulphur divide, uninhibited 137 1829  Sulphur trioxide, uninhibited 137 1829  Sulphur trioxide, uninhibited 137 1829  Sulphur trioxide and 137 1829  Sulphur trioxide, uninhibited 137 1829  Sulphur trioxide and 137 1829  Sulphur trioxide, uninhibited 137 1829  Sulphur trioxide and 137 1829  Sulphur trioxide, uninhibited 137 18		137	1830			
Sulfuric acid and Hydrofluoric acid mixtures   Sulfur terrafluoride   157   1786   Sulfur terrafluoride   154   1833   Sulfur terrafluoride   125   2418   Sulfur trioxide   137   1829   Sulfur trioxide, inhibited   137   1834   Sulfur trioxide, inhibited   137   1834   Sulfur trioxide, inhibited   137   1834   Sulfur trioxide, inhibited   137   1839   Inhibited   137   1839   Inhibited   137   1831   In		157	2796			
Sulfuric acid and Hydrofiluoric acid mixtures			2,00			
Sulfurous acid         154         1833         Sulphur trioxide, stabilized         137         1829           Sulfur trioxide         137         1829         Sulphur trioxide, uninhibited         137         1829           Sulfur trioxide, inhibited         137         1829         Sulphur trioxide and Chlorosulphonic acid mixture         137         1829           Sulfur trioxide, stabilized         137         1829         Sulphur trioxide, stabilized         137         1829           Sulfur trioxide, stabilized         137         1829         Sulphur trioxide and Chlorosulphonic acid mixture         Sulphuryl chloride         137         1834           Sulfur trioxide, uninhibited         137         1829         Sulphuryl chloride         137         1834           Sulfur trioxide, uninhibited         137         1829         Sulphuryl chloride         137         1834           Sulfuryl chloride         137         1834         Sulphuryl fluoride         130         1999           Sulphur frioxide, uninhibited         137         1834         Sulphuryl chloride         130         1999           Sulphur trioxide and Chlorosulphonic acid mixture         137         1834         Sulphur trioxide         130         1999           Sulphur trioxide and Chlorosulphoric acid	Sulfuric acid and Hydrofluoric	157	1786			
Sulfur tetrafluoride         125         2418         Sulphur trioxide, uninhibited         137         1829           Sulfur trioxide, inhibited         137         1829         Sulphur trioxide, inhibited         137         1829           Sulfur trioxide, inhibited         137         1829         Sulphur trioxide, stabilized         137         1829           Sulfur trioxide, stabilized         137         1829         Sulphur trioxide, uninhibited         137         1834           Sulfur trioxide, uninhibited         137         1829         Sulphur trioxide and Chlorosulphonic acid mixture         137         1834           Sulfur trioxide and Chlorosulphonic acid mixture         137         1834         Sulphuryl chloride         123         2191           Sulfuryl chloride         137         1834         Sulphuryl chloride         130         1999           Sulphur grifuncide         123         2191         Tars, liquid         130         1999           Sulphur grifuncide         123         2191         Targ gas grenades         159         1700           Tear gas substance, solid, n.o.s.         159         1693           Tear gas substance, solid, n.o.s.         159         1693           Tellurium compound, n.o.s.         151         3284 <td>acid mixtures</td> <td></td> <td></td> <td></td> <td></td> <td></td>	acid mixtures					
Sulfur trioxide         137         1829           Sulfur trioxide, inhibited         137         1829           Sulfur trioxide, stabilized         137         1829           Sulfur trioxide, uninhibited         137         1829           Sulfur trioxide and Chlorosulfonic acid mixture         137         1829           Sulfur trioxide and Chlorosulfonic acid mixture         137         1834           Sulfuryl chloride         137         1834           Sulfuryl fluoride         137         1834           Sulfuryl fluoride         123         2191           Sulphamic acid         154         2967           Sulphur molten         133         1350           Sulphur, molten         133         2448           Sulphur dioxide         125         1079           Sulphur dioxide, liquefied         125         1079           Sulphur dioxide, liquefied         125         1079           Sulphuric acid         137         1830           Sulphuric acid, fuming         137         1831           Sulphuric acid, fuming, with less 137         1831           Sulphuric acid, fuming, with not than 30% free Sulphur trioxide         137         1831           Sulphuric acid, fuming, with not than	Sulfurous acid	154	1833			
Sulfur trioxide, inhibited 137 1829 Sulfur trioxide, stabilized 137 1829 Sulfur trioxide, uninhibited 137 1829 Sulfur trioxide and 137 1754 Chlorosulphonic acid mixture Sulfuryl chloride 137 1834 Sulfuryl chloride 137 1834 Sulfuryl fluoride 123 2191 Sulphamic acid 154 2967 Sulphur 133 1350 Sulphur, molten 133 2448 Sulphur dioxide 125 1079 Sulphur dioxide, liquefied 125 1079 Sulphur dioxide, liquefied 126 1080 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 Less than 30% free Sulphur trioxide  Chlorosulphonic acid mixture Sulphuryl chloride 137 1829 Sulphuryl fluoride 123 2191 Tars, liquid 130 1999 Tars, liquid 130 1999 Tars, liquid 130 1999 Tear gas grenades 159 1700 Tear gas substance, liquid, n.o.s. Tear gas substance, solid, n.o.s. 159 1693 Tellurium compound, n.o.s. 159 1693 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpene hydrocarbons, n.o.s. 128 2319 Tetrabromoethane 159 2504 Sulphuric acid, fuming, with not lass than 30% free Sulphur trioxide  Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide	Sulfur tetrafluoride	125	2418			
Sulfur trioxide, inhibited         137         1829           Sulfur trioxide, stabilized         137         1829           Sulfur trioxide, uninhibited         137         1829           Sulfur trioxide and Chlorosulfonic acid mixture         137         1834           Sulfuryl chloride         137         1834           Sulfuryl fluoride         137         1834           Sulfuryl fluoride         137         1834           Sulfuryl fluoride         137         1834           Sulfuryl fluoride         137         1834           Sulphamic acid         154         2967           Sulphur         133         1350           Sulphur, molten         133         2448           Sulphur chlorides         137         1828           Sulphur dioxide         125         1079           Sulphur dioxide, liquefied         125         1079           Sulphur hexafluoride         126         1080           Sulphuric acid, fuming         137         1831           Sulphuric acid, fuming, with less than 30% free Sulphur trioxide         137         1831           Sulphuric acid, fuming, with not less than 30% free Sulphur         137         1831           Sulphuric acid, fuming, with no	Sulfur trioxide	137	1829		137	1754
Sulfur trioxide, stabilized Sulfur trioxide, uninhibited Sulfur trioxide and Chlorosulfonic acid mixture Sulfuryl chloride Sulfuryl fluoride Sulfuryl fluoride Sulphamic acid Sulphur Sulphur Sulphur Sulphur Sulphur Sulphur Sulphur Sulphur thorides Sulphur dioxide Sulphur dioxide Sulphur dioxide, liquefied Sulphur dioxide Sulphur cacid Sulphur dioxide, liquefied Sulphur dioxide, liquefied Sulphur dioxide, liquefied Sulphur cacid Sulphur dioxide	Sulfur trioxide, inhibited	137	1829		127	1921
Sulfur trioxide, uninhibited  Sulfur trioxide and Chlorosulfonic acid mixture  Sulfuryl chloride  Sulfuryl fluoride  Sulphamic acid Sulphur  Sulphur  Sulphur  Sulphur  Sulphur  Sulphur chlorides  Sulphur dioxide  Sulphur dioxide, liquefied  Sulphur dexafluoride  Sulphur cacid, fuming Sulphuric acid, fuming Sulphuric acid, fuming, with less than 30% free Sulphur trioxide  Sulphur cacid, fuming, with not less than 30% free Sulphur trioxide  Sulphur cacid, fuming, with not less than 30% free Sulphur trioxide  137 1829  Tars, liquid TDE (1,1-Dichloro-2,2-bis (p-chlorophenyl)ethane)  Tear gas grenades 159 1700  Tear gas substance, liquid, n.o.s. 159 1693  Tear gas substance, solid, n.o.s. 159 1693  Tellurium compound, n.o.s. 151 3284  Tellurium hexafluoride 125 2195  Terpene hydrocarbons, n.o.s. 128 2319  Tetrachloroethane 151 1702  Tetrachloroethylene 151 1702  Tetrachloroethylene 153 1704	Sulfur trioxide, stabilized	137	1829			
Sulfury I chloride 137 1834 Sulfury I chloride 123 2191 Sulphamic acid 154 2967 Sulphur 133 1350 Sulphur, molten 133 2448 Sulphur chlorides 137 1828 Sulphur dioxide 125 1079 Sulphur dioxide, liquefied 125 1079 Sulphur hexafluoride 126 1080 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide  Sulphur cacid, fuming, with not less than 30% free Sulphur trioxide  TDE (1,1-Dichloro-2,2-bis (p-chlorophenyl)ethane)  Tear gas grenades 159 1700 Tear gas substance, liquid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 159 1693 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terrachloroethane 159 2504  1,1,2,2-Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetrachloroethylene 160 1897 Tetrachly dithiopyrophosphate 153 1704	Sulfur trioxide, uninhibited	137	1829			
Sulfuryl chloride Sulfuryl fluoride Sulphamic acid Sulphamic acid Sulphur chlorides Sulphur chlorides Sulphur dioxide Sulphur dioxide Sulphur dioxide Sulphur dioxide Sulphur hexafluoride Sulphur hexafluoride Sulphuric acid Sulphuric acid, fuming Sulphuric acid, fuming, with less than 30% free Sulphur trioxide Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  137 1834  (p-chlorophenyl)ethane) Tear gas grenades Tear gas devices Tear gas substance, liquid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 1079 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrachloroethane 151 1702 Tetrachloroethylene Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704		137	1754			
Sulfuryl fluoride Sulphamic acid Sulphur Sulphur Sulphur, molten Sulphur chlorides Sulphur chlorides Sulphur dioxide Sulphur dioxide Sulphur dioxide, liquefied Sulphur hexafluoride Sulphur hexafluoride Sulphuric acid Sulphuric acid, fuming Sulphuric acid, fuming, with less than 30% free Sulphur trioxide  137 1834 Tear gas grenades Tear gas devices Tear gas substance, liquid, n.o.s. Tear gas substance, solid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 150 1693 Tear gas substance, solid, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrabromoethane 159 1700 Tear gas grenades 159 1700 Tear gas devices 159 1693 Tear gas substance, solid, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Tetrabromoethane 159 1700 Tear gas devices 159 1693 Tear gas substance, liquid, n.o.s. 150 1693 Tear gas substance, liquid, n.o.s. 150 1693 Tear gas vibstance, solid, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Tetrabromoethane 159 1700 Tear gas devices 159 1693 Tear gas substance, solid, n.o.s. 150 1693 Tear gas devices 159 1693 Tear gas vibstance, solid, n.o.s. 159 1693 Tear gas vibstance, solid, n.o.s. 151 284 Tellurium compound, n.o.s. 151 284 Tellurium compound, n.o.s. 151 295 Tear gas vibstance, solid, n.o.s. 151 2					131	2/01
Sulphamic acid Sulphur Sulphur Sulphur, molten Sulphur chlorides Sulphur dioxide Sulphur dioxide, liquefied Sulphur hexafluoride Sulphur hexafluoride Sulphuric acid Sulphuric acid Sulphuric acid, fuming Sulphuric acid, fuming, with less than 30% free Sulphur trioxide  123 2191 Tear gas devices Tear gas substance, liquid, n.o.s. Tear gas substance, solid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 1079 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrableroethane 159 1693 Tear gas devices Tear gas substance, liquid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 151 3284 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 159 1693 Tetrachleroethane 150 1693 Tetrachleroethane 151 1702 Tetrachleroethane 152 1079 Tetrachleroethane 153 1704					159	1700
Sulphur sulphur, molten 133 1350 Sulphur chlorides 137 1828 Sulphur dioxide 125 1079 Sulphur dioxide, liquefied 125 1079 Sulphur hexafluoride 126 1080 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide 137 1831 less than 30% free Sulphur trioxide 138 139 1693 Tear gas substance, liquid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 159 1693 Tear gas substance, solid, n.o.s. 159 1693 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrabromoethane 159 2504 1,1,2,2-Tetrachloroethane 151 1702 Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704						
Sulphur chlorides 133 2448 Sulphur chlorides 137 1828 Sulphur dioxide 125 1079 Sulphur dioxide, liquefied 125 1079 Sulphur hexafluoride 126 1080 Sulphuric acid 137 1830 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide  138 2448 Tear gas substance, solid, n.o.s. 159 1693 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrabromoethane 159 2504 1,1,2,2-Tetrachloroethane 151 1702 Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704					159	
Sulphur chlorides 137 1828 Sulphur dioxide 125 1079 Sulphur dioxide, liquefied 125 1079 Sulphur hexafluoride 126 1080 Sulphuric acid 137 1830 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  137 1831 Tellurium compound, n.o.s. 151 3284 Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrableromoethane 159 2504 1,1,2,2-Tetrachloroethane 151 1702 Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704						
Sulphur dioxide 125 1079 Sulphur dioxide, liquefied 125 1079 Sulphur hexafluoride 126 1080 Sulphuric acid 137 1830 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  Tellurium hexafluoride 125 2195 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrabromoethane 159 2504 Tetrachloroethane 151 1702 Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704				Tear gas substance, solid, n.o.s	. 159	1693
Sulphur dioxide, liquefied 125 1079 Sulphur hexafluoride 126 1080 Sulphuric acid 137 1830 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  125 2319 Terpene hydrocarbons, n.o.s. 128 2319 Terpinolene 128 2541 Tetrabromoethane 159 2504 1,1,2,2-Tetrachloroethane 151 1702 Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704	Sulphur chlorides	137		Tellurium compound, n.o.s.	151	3284
Sulphur hexafluoride 126 1080 Sulphuric acid 137 1830 Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  Terpinolene 128 2541 Tetrabromoethane 159 2504  1,1,2,2-Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704	Sulphur dioxide	125		Tellurium hexafluoride	125	2195
Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide Sulphuric acid, fuming, with not 137 1831 less than 30% free Sulphur trioxide  Sulphuric acid, fuming, with not 137 1831 less than 30% free Sulphur trioxide  Tetrachloroethane 151 1702 Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704	Sulphur dioxide, liquefied	125	1079	Terpene hydrocarbons, n.o.s.	128	2319
Sulphuric acid, fuming 137 1831 Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide  137 1831 Tetrachloroethane 151 1702 Tetrachloroethane 160 1897 Tetraethyl dithiopyrophosphate 153 1704	Sulphur hexafluoride	126	1080	Terpinolene	128	2541
Sulphuric acid, fuming, with less 137 1831 than 30% free Sulphur trioxide  Sulphuric acid, fuming, with not 137 1831 less than 30% free Sulphur trioxide  Tetrachloroethane 151 1702  Tetrachloroethylene 160 1897  Tetraethyl dithiopyrophosphate 153 1704	Sulphuric acid	137	1830	Tetrabromoethane	159	2504
than 30% free Sulphur trioxide Sulphuric acid, fuming, with not 137 1831 less than 30% free Sulphur trioxide  Tetrachloroethylene 160 1897 Tetraethyl dithiopyrophosphate 153 1704	Sulphuric acid, fuming	137	1831	1,1,2,2-Tetrachloroethane	151	1702
Sulphuric acid, fuming, with not 137 1831 less than 30% free Sulphur trioxide  Tetraethyl dithiopyrophosphate 153 1704			1831			
less than 30% free Sulphur Tetraethyl dithiopyrophosphate 153 1/04 trioxide	Sulphuric acid, fuming, with not	137	1831			
	less than 30% free Sulphur			Tetraethyl dithiopyrophosphate		

	Name of Material G	uide No.		Name of Material	Guide No.	
	Tetraethyl dithiopyrophosphate, mixture, dry or liquid	153	1704	Tetrafluoromethane, compressed	126	1982
	Tetraethyl dithiopyrophosphate and gases, in solution	123	1703	1,2,3,6-Tetrahydro- benzaldehyde	132	2498
	Tetraethyl dithiopyrophosphate and gases, mixtures	123	1703	Tetrahydrofuran	127	2056
	Tetraethyl dithiopyrophosphate	123	1703	Tetrahydrofurfurylamine	129	2943
	and gases, mixtures, or in	123	1703	Tetrahydrophthalic anhydrides	156	2698
	solution (LC50 more than 200			1,2,3,6-Tetrahydropyridine	129	2410
	ppm but not more than 5000 ppm)			1,2,5,6-Tetrahydropyridine	129	2410
	Tetraethyl dithiopyrophosphate	123	1703	Tetrahydrothiophene	129	2412
	and gases, mixtures, or in		1700	Tetralin hydroperoxide	145	2136
	solution (LC50 not more than 200 ppm)			Tetramethylammonium hydroxide	153	1835
	Tetraethylenepentamine	153	2320	1,1,3,3-Tetramethylbutyl	145	2160
	Tetraethyl lead, liquid	131	1649	hydroperoxide		UI UI
	Tetraethyl pyrophosphate, liquid		2783	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate	148	2161
	Tetraethyl pyrophosphate, liquid		3018	Tetramethylmethylenediamine	132	9069
	Tetraethyl pyrophosphate, solid		2783	Tetramethylsilane	130	2749
	Tetraethyl pyrophosphate and compressed gas mixtures	123	1705	Tetranitromethane	143	1510
	Tetraethyl pyrophosphate and	123	1705	Tetrapropyl orthotitanate	128	2413
	compressed gas mixtures (LC50 more than 200 ppm but			Textile treating compound or mixture, liquid (corrosive)	154	1760
	not more than 5000 ppm)			Thallium chlorate	141	2573
	Tetraethyl pyrophosphate and compressed gas mixtures	123	1705	Thallium compound, n.o.s.	151	1707
	(LC50 not more than 200 ppm)			Thallium nitrate	141	2727
	Tetraethyl pyrophosphate	152	2783	Thallium sulfate, solid	151	1707
	mixture, dry			Thallium sulphate, solid	151	1707
	Tetraethyl silicate	132	1292	4-Thiapentanal	152	2785
	1,1,1,2-Tetrafluoroethane	126	3159	Thia-4-pentanal	152	2785
	Tetrafluoroethane and Ethylene	126	3299	Thioacetic acid	129	2436
	oxide mixture, with not more than 5.6% Ethylene oxide			Thioglycol	153	2966
8	Tetrafluoroethylene, inhibited	116P	1081	Thioglycolic acid	153	1940
	Tetrafluoromethane	126	1982	Thiolactic acid	153	2936
	100					

Name of Material	Guide No.		Name of Material G	uide No.	
Thionyl chloride	137	1836	Toluene diisocyanate	156	2078
Thiophene	130	2414	Toluene sulfonic acid, liquid,	153	2584
Thiophosgene	157	2474	with more than 5% free Sulfuric acid		112
Thiophosphoryl chloride	157	1837	Toluene sulfonic acid, liquid,	153	2586
Thiram	151	2771	with not more than 5% free	133	2300
Thorium metal, pyrophoric	162	2975	Sulfuric acid		
Thorium nitrate, solid	162	2976	Toluene sulfonic acid, solid, with	153	2583
Tinctures, medicinal	127	1293	more than 5% free Sulfuric		
Tin tetrachloride	137	1827	Toluene sulfonic acid, solid, with	153	2585
Tin tetrachloride, pentahydrate	154	2440	not more than 5% free Sulfuric	133	2000
Titanium disulfide	135	3174	acid		
Titanium disulphide	135	3174	Toluene sulphonic acid, liquid,	153	2584
Titanium hydride	170	1871	with more than 5% free Sulphuric acid		
Titanium powder, dry	135	2546	Toluene sulphonic acid, liquid,	153	2586
Titanium powder, wetted with not less than 25% water	170	1352	with not more than 5% free Sulphuric acid	T E	
Titanium sponge granules	170	2878	Toluene sulphonic acid, solid,	153	2583
Titanium sponge powders	170	2878	with more than 5% free Sulphuric acid		
Titanium sulfate, solution	154	1760	Toluene sulphonic acid, solid,	153	2585
Titanium sulphate, solution	154	1760	with not more than 5% free	133	2000
Titanium tetrachloride	137	1838	Sulphuric acid		
Titanium tetrachloride and	137	2443	Toluidines	153	1708
Vanadium oxytrichloride, mixture			Toluidines, liquid	153	1708
Titanium trichloride, pyrophoric	135	2441	Toluidines, solid	153	1708
Titanium trichloride mixture	157	2869	2,4-Toluylenediamine	151	1709
Titanium trichloride mixture,	135	2441	Toxaphene	151	2761
pyrophoric			Toxic liquid, corrosive, inorganic, n.o.s.	154	3289
TNT, wetted with not less than 30% water	113	1356	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation	154	3289
Toe puffs, nitrocellulose base	133	1353	Hazard Zone A)		
Toluene	130	1294	Toxic liquid, corrosive,	154	3289
2,4-Toluenediamine	151	1709	inorganic, n.o.s. (Inhalation		
Toluenediamine	151	1709	Hazard Zone B)		
				Da	ae 161

Name of Material G	uide No.	No.	Name of Material	Guide No.	
Toxic liquid, corrosive, organic, n.o.s.	154	2927	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	142	3122
Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard	154	2927	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	142	3122
Zone A)  Toxic liquid, corrosive, organic,	154	2927	Toxic liquid, water-reactive, n.o.s.	139	3123
n.o.s. (Inhalation Hazard Zone B)	134	2921	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard	139	3123
Toxic liquid, flammable, n.o.s.	131	2929	Zone A)		
Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	131	2929	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard	139	3123
Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	131	2929	Zone B)  Toxic liquid, which in contact	139	3123
Toxic liquid, flammable, organic, n.o.s.	131	2929	with water emits flammable gases, n.o.s.	133	3123
Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	131	2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	139	3123
Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	131	2929	Toxic liquid, which in contact with water emits flammable	139	3123
Toxic liquid, inorganic, n.o.s.	151	3287	gases, n.o.s. (Inhalation Hazard Zone B)		
Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	151	3287	Toxic solid, corrosive, inorganic n.o.s.	, 154	3290
Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	151	3287	Toxic solid, corrosive, organic, n.o.s.	154	2928
Toxic liquid, n.o.s.	153	2810	Toxic solid, flammable, n.o.s.	134	2930
Toxic liquid, n.o.s. (Inhalation Hazard Zone A)	153	2810	Toxic solid, flammable, organic, n.o.s.	134	2930
Toxic liquid, n.o.s. (Inhalation Hazard Zone B)	153	2810	Toxic solid, inorganic, n.o.s.	151	3288
Toxic liquid, organic, n.o.s.	153	2810	Toxic solid, n.o.s.	154	2811
Toxic liquid, organic, n.o.s.	153	2810	Toxic solid, organic, n.o.s.	154	2811
(Inhalation Hazard Zone A)			Toxic solid, oxidizing, n.o.s.	141	3086
Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)	153	2810	Toxic solid, self-heating, n.o.s. Toxic solid, water-reactive,	136 139	3124 3125
Toxic liquid, oxidizing, n.o.s.	142	3122	n.o.s.		

Name of Material	Guide No.		Name of Material	Guide No.	
Toxic solid, which in contact with		3125	Trichlorophenol	153	2020
water emits flammable gases, n.o.s.			2,4,5-Trichlorophenoxyacetic acid	152	2765
Toxins, extracted from living sources, n.o.s.	153	3172	2,4,5-Trichlorophenoxy- propionic acid	152	2765
Triallylamine	132	2610	Trichlorosilane	139	1295
Triallyl borate	156	2609	Trichloro-s-triazinetrione, dry	141	2468
Triazine pesticide, liquid, flammable, poisonous	131	2764	(mono)-(Trichloro)-tetra- (monopotassium dichloro)-	141	2468
Triazine pesticide, liquid,	131	2764	penta-s-triazinetrione, dry		
flammable, toxic		0000	Tricresyl phosphate	151	2574
Triazine pesticide, liquid, poisonous	151	2998	Triethanolamine dodecylbenzenesulfonate	171	9151
Triazine pesticide, liquid, poisonous, flammable	131	2997	Triethanolamine dodecylbenzenesulphonate	171	9151
Triazine pesticide, liquid, toxic	151	2998	Triethylamine	132	1296
Triazine pesticide, liquid, toxic, flammable	131	2997	Triethylenetetramine	153	2259
Triazine pesticide, solid, poisonous	151	2763	Triethyl phosphite  Trifluoroacetic acid	129	2323 2699
Triazine pesticide, solid, toxic	151	2763	Trifluoroacetyl chloride	125	3057
Tri-(1-aziridinyl)phosphine	152	2501	Trifluorochloroethylene	119P	1082
oxide, solution			Trifluorochloroethylene,	119P	1082
Tributylamine	153	2542	1,1,1-Trifluoroethane	115	2035
Tributylphosphane	135	3254	Trifluoroethane, compressed	. 115	2035
Tributylphosphine	135	3254	Trifluoromethane	126	1984
Trichlorfon	152	2783 1839	Trifluoromethane, refrigerated	120	3136
Trichloroacetic acid	153	2564	liquid		
Trichloroacetic acid, solution	153 156	2442	Trifluoromethane and	126	2599
Trichloroacetyl chloride	153	2321	Chlorotrifluoromethane azeotropic mixture with		100
Trichlorobenzenes, liquid	152	2322	approximately 60%		
Trichlorobutene	160	2831	Chlorotrifluoromethane		- 10
1,1,1-Trichloroethane	160	1710	2-Trifluoromethylaniline	153	2942
Trichloroethylene	141	2468	3-Trifluoromethylaniline	153	2948
Trichloroisocyanuric acid, dry	141	2400	Triisobutylene	128	2324

	Name of Material	ouide No.		Name of Material G	uide No.	
	Triisocyanatoisocyanurate of Isophoronediisocyanate, solution (70%)	127	2906	Uranium hexafluoride, fissile containing more than 1% Uranium-235	166	2977
	Triisopropyl borate	129	2616	Uranium hexafluoride, fissile	166	2978
	Trimethoxysilane	132	9269	excepted		
	Trimethylacetyl chloride	132	2438	Uranium hexafluoride, low specific activity	166	2978
	Trimethylamine, anhydrous	118	1083	Uranium hexafluoride, non-	166	2978
	Trimethylamine, aqueous solution	132	1297	fissile		
	1,3,5-Trimethylbenzene	129	2325	Uranium metal, pyrophoric	162	2979
	Trimethyl borate	129	2416	Uranyl acetate	162	9180
Ì	Trimethylchlorosilane	155	1298	Uranyl nitrate, hexahydrate, solution	162	2980
	Trimethylcyclohexylamine	153	2326	Uranyl nitrate, solid	162	2981
	Trimethylhexamethylenediamines	153	2327	Urea hydrogen peroxide	140	1511
	Trimethylhexamethylene diisocyanate	156	2328	Urea nitrate, wetted with not less than 20% water		1357
	Trimethyl phosphite	129	2329	Urea peroxide	140	1511
	Trinitroaniline, wetted	113	9073	Valeraldehyde	129	2058
	Trinitrobenzene, wetted with not less than 30% water	113	1354	Valeryl chloride	132	2502
	Trinitrobenzoic acid, wetted with	113	1355	Vanadium compound, n.o.s.	151	3285
	not less than 30% water	- 50		Vanadium oxytrichloride	137	2443
	Trinitrophenol, wetted with not less than 30% water	113	1344	Vanadium oxytrichloride and Titanium tetrachloride, mixture	137	2443
	Trinitrotoluene, wetted with not less than 30% water	113	1356	Vanadium pentoxide	151	2862
	Tripropylamine	132	2260	Vanadium tetrachloride	137	2444
į	Tripropylene	128	2057	Vanadium trichloride	157	2475
	Tris-(1-aziridinyl)phosphine	152	2501	Vanadium trioxide	154	2860
	oxide, solution		100	Vanadyl sulfate	151	2931
	Tungsten hexafluoride		2196	Vanadyl sulphate	151	2931
	Turpentine	128	1299	Vinyl acetate	129P	
	Turpentine substitute	128	1300	Vinyl acetate, inhibited	129P	
	Undecane	128	2330	Vinyl bromide, inhibited	116P	
				Vinyl butyrate, inhibited	129P	2838

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	No.
Vinyl chloride	116P	1086	Waste Type 18	154	9318
Vinyl chloride, inhibited	116P	1086	Waste Type 19	154	9319
Vinyl chloride, stabilized	116P	1086	Waste Type 20	154	9320
Vinyl chloroacetate	155	2589	Waste Type 21	154	9321
Vinyl ethyl ether	127P	1302	Waste Type 22	154	9322
Vinyl ethyl ether, inhibited	127P	1302	Waste Type 23	154	9323
Vinyl fluoride, inhibited	116P	1860	Waste Type 24	152	9324
Vinylidene chloride, inhibited	129P	1303	Waste Type 25	127	9325
Vinyl isobutyl ether	127P	1304	Waste Type 26	152	9326
Vinyl isobutyl ether, inhibited	127P	1304	Waste Type 27	131	9327
Vinyl methyl ether	116P	1087	Waste Type 28	131	9328
Vinyl methyl ether, inhibited	116P	1087	Waste Type 29	153	9329
Vinylpyridines, inhibited	131P	3073	Waste Type 30	153	9330
Vinyltoluene, inhibited	130P	2618	Waste Type 31	129	9331
Vinyltrichlorosilane	155	1305	Waste Type 32	129	9332
Vinyltrichlorosilane, inhibited	155	1305	Waste Type 33	129	9333
Waste Type 1	153	9301	Waste Type 34	129	9334
Waste Type 2	153	9302	Waste Type 35	153	9335
Waste Type 3	131	9303	Waste Type 36	153	9336
Waste Type 4	153	9304	Waste Type 37	153	9337
Waste Type 5	131	9305	Waste Type 38	153	9338
Waste Type 6	154	9306	Waste Type 39	153	9339
Waste Type 7	154	9307	Waste Type 40	. 153	9340
Waste Type 8	153	9308	Waste Type 41	132	9341
Waste Type 9	153	9309	Waste Type 42	129	9342
Waste Type 10	153	9310	Waste Type 43	154	9343
Waste Type 11	153	9311	Waste Type 44	132	9344
Waste Type 12	153	9312	Waste Type 45	132	9345
Waste Type 13	153	9313	Waste Type 46	153	9346
Waste Type 14	153	9314	Waste Type 47	132	9347
Waste Type 15	153	9315	Waste Type 48	153	9348
Waste Type 16	154	9316	Waste Type 49	153	9349
Waste Type 17	154	9317	Waste Type 50	153	9350
	-	THE REAL PROPERTY.	AND DESCRIPTION OF THE PERSON	D.	age 165

Page 165

Name of Material	Guide No.	D No.	Name of Material G	uide No.	No.
Waste Type 51	153	9351	Waste Type 84	151	9384
Waste Type 52	153	9352	Waste Type 85	154	9385
Waste Type 53	153	9353	Waste Type 86	154	9386
Waste Type 54	153	9354	Waste Type 87	154	9387
Waste Type 55	153	9355	Waste Type 88	151	9388
Waste Type 56	153	9356	Waste Type 89	154	9389
Waste Type 57	153	9357	Waste Type 90	154	9390
Waste Type 58	153	9358	Waste Type 91	153	9391
Waste Type 59	151	9359	Waste Type 92	154	9392
Waste Type 60	132	9360	Waste Type 93	153	9393
Waste Type 61	151	9361	Waste Type 94	151	9394
Waste Type 62	151	9362	Waste Type 95	153	9395
Waste Type 63	151	9363	Waste Type 96	151	9396
Waste Type 64	151	9364	Waste Type 97	153	9397
Waste Type 65	151	9365	Waste Type 99	137	9399
Waste Type 66	151	9366	Waste Type 100	137	9400
Waste Type 67	152	9367	Water pump system	126	1956
Waste Type 68	154	9368	Water-reactive liquid, corrosive,	138	3129
Waste Type 69	151	9369	n.o.s.		
Waste Type 70	151	9370	Water-reactive liquid, n.o.s.	138	3148
Waste Type 71	133	9371	Water-reactive liquid, poisonous, n.o.s.	139	3130
Waste Type 72	151	9372	Water-reactive liquid, toxic,	139	3130
Waste Type 73	151	9373	n.o.s.	133	3130
Waste Type 74	127	9374	Water-reactive solid, corrosive,	138	3131
Waste Type 75	153	9375	n.o.s.		
Waste Type 76	153	9376	Water-reactive solid, flammable,	138	3132
Waste Type 77	131	9377	n.o.s.	100	2040
Waste Type 78	153	9378	Water-reactive solid, n.o.s.	138	2813
Waste Type 79	153	9379	Water-reactive solid, oxidizing, n.o.s.	138	3133
Waste Type 80	151	9380	Water-reactive solid, poisonous,	139	3134
Waste Type 81	154	9381	n.o.s.		
Waste Type 82	154	9382	Water-reactive solid, self-	138	3135
Waste Type 83	154	9383	heating, n.o.s.		
Page 166	THE REAL PROPERTY.	The same of	THE RESERVE OF THE PERSON NAMED IN		TAX DES

Name of Material	Guide No.	No.	Name of Material	Guide No.	ID No.
Water-reactive solid, toxic, n.o.	s.139	3134	Xylenes	130	1307
Water-reactive substances,	138	3129	Xylenols	153	2261
liquid, corrosive, n.o.s.	-	-1.77	Xylidines	153	1711
Water-reactive substances, liquid, n.o.s.	138	3148	Xylyl bromide	152	1701
Water-reactive substances,	139	3130	Yellow phosphorus, dry	136	1381
liquid, poisonous, n.o.s.		100	Yellow phosphorus, in solution	136	1381
Water-reactive substances,	139	3130	Yellow phosphorus, molten	136	2447
liquid, toxic, n.o.s.	400	0404	Yellow phosphorus, under water		1381
Water-reactive substances, solid, corrosive, n.o.s.	138	3131	Zinc acetate	171	9153
Water-reactive substances, solid, flammable, n.o.s.	138	3132	Zinc ammonium chloride	171	9154
			Zinc ammonium nitrite	140	1512
Water-reactive substances, solid, n.o.s.	138	2813	Zinc arsenate	151	1712
			Zinc arsenate and Zinc arsenite mixture	151	1712
Water-reactive substances, solid, oxidizing, n.o.s.	138	3133	Zinc arsenite	151	1712
Water-reactive substances, solid, poisonous, n.o.s.	139	3134	Zinc arsenite and Zinc arsenate mixture	151	1712
Water-reactive substances, solid, self-heating, n.o.s.	138	3135	Zinc ashes	138	1435
			Zinc bisulfite solution	154	2693
Water-reactive substances, solid, toxic, n.o.s.	139	3134	Zinc bisulphite solution	154	2693
Wheelchair, electric, with batteries	154	3171	Zinc borate	171	9155
			Zinc bromate	140	2469
White asbestos	171	2590	Zinc bromide	171	9156
White phosphorus, dry	136	1381	Zinc carbonate	171	9157
White phosphorus, in solution	136	1381	Zinc chlorate	140	1513
White phosphorus, molten	136	2447	Zinc chloride, anhydrous	154	2331
White phosphorus, under water	136	1381	Zinc chloride, solution	154	1840
Wood preservatives, liquid	129	1306	Zinc cyanide	151	1713
Wool waste, wet	133		Zinc dithionite	171	1931
Xenon	121	2036	Zinc dross	138	1435
Xenon, compressed	121	2036	Zinc dust	138	1436
Xenon, refrigerated liquid	120	2591	Zinc fluoride	151	9158
(cryogenic liquid)			Zinc fluorosilicate	151	2855

Name of Material (	9uide No.		Name of Material	Guide No.	No.
Zinc formate	171	9159	Zirconium sulfate	171	9163
Zinc hydrosulfite	171	1931	Zirconium sulphate	171	9163
Zinc hydrosulphite	171	1931	Zirconium suspended in a	170	1308
Zinc nitrate	140	1514	flammable liquid		
Zinc permanganate	140	1515	Zirconium suspended in a liquid (flammable)	170	1308
Zinc peroxide	143	1516	Zirconium tetrachloride	137	2503
Zinc phenolsulfonate	171	9160	Ziredinum tetraemonue	137	2303
Zinc phenolsulphonate	171	9160	American (March		
Zinc phosphide	139	1714	White Harrison		
Zinc powder	138	1436	Mary Law To April 1970		
Zinc residue	138	1435	The state of the s		
Zinc resinate	133	2714	Television in the later		
Zinc selenate	151	2630			
Zinc selenite	151	2630	THE REAL PROPERTY.		
Zinc silicofluoride	151	2855	Table 1		
Zinc skimmings	138	1435	William Town		
Zinc sulfate	171	9161	AND DESCRIPTION OF THE PARTY OF		
Zinc sulphate	171	9161			
Zirconium, dry, coiled wire, finished metal sheets or strips	170	2858	The second second		
Zirconium, dry, finished sheets, strips or coiled wire	135	2009	AND SHAPE OF THE PARTY OF		
Zirconium hydride	138	1437	AND THE REAL PROPERTY.		
Zirconium metal, liquid, suspension	170	1308	All the second second		
Zirconium metal, powder, wet	170	1358			
Zirconium nitrate	140	2728			
Zirconium picramate, wetted with not less than 20% water	113	1517	The state of the state of		
Zirconium potassium fluoride	171	9162	The second second		
Zirconium powder, dry	135	2008	90003-100		
Zirconium powder, wetted with not less than 25% water	170	1358	THE REPORT OF THE PARTY.		
Zirconium scrap	135	1932		201 A	

NAERG96

GUIDE

# **GUIDES**

## FIRE OR EXPLOSION

- · May explode from heat, shock, friction or contamination.
- · May react violently or explosively on contact with air, water or foam.
- · May be ignited by heat, sparks or flames.
- · Vapors may travel to source of ignition and flash back.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

# HEALTH

- Inhalation, ingestion or contact with substance may cause severe injury, infection, disease
  or death.
- · High concentration of gas may cause asphyxiation without warning.
- · Contact may cause burns to skin and eyes.
- · Fire or contact with water may produce irritating, toxic and/or corrosive gases.
- · Runoff from fire control may cause pollution.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

#### Fire

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all
directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

## FIRE

CAUTION: Material may react with extinguishing agent.

#### **Small Fires**

• Dry chemical, CO<sub>2</sub>, water spray or regular foam.

# Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks

- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills • Dike far ahead of liquid spill for later disposal.

# FIRST AID

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Shower and wash with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- MAY EXPLODE AND THROW FRAGMENTS 1600 meters (1 MILE) OR MORE IF FIRE REACHES CARGO.
- · For information on "Compatibility Group" letters, refer to Glossary section.

## HEALTH

· Fire may produce irritating, corrosive and/or toxic gases.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 500 meters (1/3 mile) in all directions.
- Move people out of line of sight of the scene and away from windows.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

# Large Spill

· Consider initial evacuation for 800 meters (1/2 mile) in all directions.

#### Fire

- If rail car or trailer is involved in a fire and heavily encased explosives such as bombs or artillery projectiles are suspected, ISOLATE for 1600 m (1 mile) in all directions; also, initiate evacuation including emergency responders for 1600 m (1 mile) in all directions.
- When heavily encased explosives are not involved, evacuate the area for 800 meters (1/2 mile) in all directions.

# FIRE

### **CARGO Fires**

- DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!
- Stop all traffic and clear the area for at least 1600 meters (1 mile) in all directions and let burn.
- Do not move cargo or vehicle if cargo has been exposed to heat.

#### TIRE or VEHICLE Fires

- Use plenty of water FLOOD it! If water is not available, use CO2, dry chemical or dirt.
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- · Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

## FIRST AID

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

# FLAMMABLE SOLIDS - TOXIC (WET/DESENSITIZED EXPLOSIVE)

# **POTENTIAL HAZARDS**

#### FIRE OR EXPLOSION

- · Flammable/combustible material.
- · May be ignited by heat, sparks or flames.
- DRIED OUT material may explode if exposed to heat, flame, friction or shock; Treat as an explosive (GUIDE 112).
- · Keep material wet with water or treat as an explosive (Guide 112).
- Runoff to sewer may create fire or explosion hazard.

### HEALTH

- · Some are toxic and may be fatal if inhaled, swallowed or absorbed through skin.
- · Contact may cause burns to skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

# EVACUATION

# Large Spill

· Consider initial evacuation for 500 meters (1/3 mile) in all directions.

#### Fire

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all
directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

# FIRE

## **CARGO Fires**

- DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!
- Stop all traffic and clear the area for at least 800 meters (1/2 mile) in all directions and let burn.
- · Do not move cargo or vehicle if cargo has been exposed to heat.

#### TIRE or VEHICLE Fires

- Use plenty of water FLOOD it! If water is not available, use CO2, dry chemical or dirt.
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.

## **Small Spills**

· Flush area with flooding quantities of water.

## Large Spills

- · Wet down with water and dike for later disposal.
- KEEP "WETTED" PRODUCT WET BY SLOWLY ADDING FLOODING QUANTITIES OF WATER.

# FIRST AID

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- MAY EXPLODE AND THROW FRAGMENTS 500 meters (1/3 MILE) OR MORE IF FIRE REACHES CARGO.
- · For information on "Compatibility Group" letters, refer to Glossary section.

## HEALTH

Fire may produce irritating, corrosive and/or toxic gases.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- · Move people out of line of sight of the scene and away from windows.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

# Large Spill

· Consider initial evacuation for 250 meters (800 feet) in all directions.

#### Fire

 If rail car or trailer is involved in a fire, ISOLATE for 500 meters (1/3 mile) in all directions; also initiate evacuation including emergency responders for 500 meters (1/3 mile) in all directions

## FIRE

#### **CARGO Fires**

- DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!
- Stop all traffic and clear the area for at least 500 meters (1/3 mile) in all directions and let burn.
- · Do not move cargo or vehicle if cargo has been exposed to heat.

#### TIRE or VEHICLE Fires

- · Use plenty of water FLOOD it! If water is not available, use CO,, dry chemical or dirt.
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

# FIRST AID

- Move victim to fresh air. Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

# SUPPLEMENTAL INFORMATION

- Packages bearing the 1.4S label contain explosive substances or articles that are designed or packaged in such a manner that when involved in a fire, may burn vigorously with localized detonations and projection of fragments.
- Effects are usually confined to immediate vicinity of packages.
- If fire threatens cargo area containing packages bearing the 1.4S label, consider initial isolation of at least 15 meters (50 feet) in all directions. Fight fire with normal precautions from a reasonable distance.

## FIRE OR EXPLOSION

- EXTREMELY FLAMMABLE.
- · Will be easily ignited by heat, sparks or flames.
- · Will form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Vapors may travel to source of ignition and flash back.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## HEALTH

- · Vapors may cause dizziness or asphyxiation without warning.
- · Some may be irritating if inhaled at high concentrations.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- · Fire may produce irritating and/or toxic gases.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- · Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

# **EVACUATION**

# Large Spill

· Consider initial downwind evacuation for at least 800 meters (1/2 mile).

#### Fire

If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all
directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

## FIRE

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

#### **Small Fires**

· Dry chemical or CO<sub>2</sub>.

## **Large Fires**

- · Water spray or fog.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.
- Prevent spreading of vapors through sewers, ventilation systems and confined areas.
- · Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- EXTREMELY FLAMMABLE.
- · Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Silane will ignite spontaneously in air.
- Some may polymerize (P) explosively when heated or involved in a fire.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- · Ruptured cylinders may rocket.

## HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- · Some may be toxic if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first, If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- · Keep unauthorized personnel away.
- Stav upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

# Large Spill

· Consider initial downwind evacuation for at least 800 meters (1/2 mile).

#### Fire

## FIRE

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

#### **Small Fires**

Dry chemical or CO<sub>2</sub>.

## **Large Fires**

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Stop leak if you can do it without risk.
- · Do not touch or walk through spilled material.
- · Do not direct water at spill or source of leak.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Isolate area until gas has dispersed.

- Move victim to fresh air.
   Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · TOXIC: Extremely Hazardous.
- · May be fatal if inhaled or absorbed through skin.
- Initial odor may be irritating or foul and may deaden your sense of smell.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite
- · Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

## FIRE OR EXPLOSION

- · These materials are extremely flammable.
- May form explosive mixtures with air.
- · May be ignited by heat, sparks or flames.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Runoff may create fire or explosion hazard.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

# EVACUATION

## Spill

 See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

## **Small Fires**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

## Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Isolate area until gas has dispersed.
- Consider igniting spill or leak to eliminate toxic gas concerns.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- EXTREMELY FLAMMABLE.
- · May be ignited by heat, sparks or flames.
- · May form explosive mixtures with air.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Vapors may travel to source of ignition and flash back.
- · Some of these materials may react violently with water.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## HEALTH

- · May cause toxic effects if inhaled.
- · Vapors are extremely irritating.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control may cause pollution.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

# **EVACUATION**

# Large Spill

Consider initial downwind evacuation for at least 800 meters (1/2 mile).

#### Fire

## FIRE

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

### **Small Fires**

· Dry chemical or CO<sub>2</sub>.

## Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · TOXIC; may be fatal if inhaled or absorbed through skin.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- · Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

## FIRE OR EXPLOSION

- · Flammable; may be ignited by heat, sparks or flames.
- · May form explosive mixtures with air.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Vapors may travel to source of ignition and flash back.
- · Some of these materials may react violently with water.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.
- · Runoff may create fire or explosion hazard.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

# **EVACUATION**

# Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

## **Small Fires**

• Dry chemical, CO2, water spray or alcohol-resistant foam.

## Large Fires

- · Water spray, fog or alcohol-resistant foam.
- FOR CHLOROSILANES, DO NOT USE WATER; use AFFF alcohol-resistant medium expansion foam.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- · Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- $\bullet \ \ \mathsf{FOR} \ \mathsf{CHLOROSILANES}, use \ \mathsf{AFFF} \ \mathsf{alcohol\text{-}resistant} \ \mathsf{medium} \ \mathsf{expansion} \ \mathsf{foam} \ \mathsf{to} \ \mathsf{reduce} \ \mathsf{vapors}.$
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- · Isolate area until gas has dispersed.

- Move victim to fresh air.
   Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.

## FIRE OR EXPLOSION

- · Non-flammable gases.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 25 meters (80 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids or solids.

# **EVACUATION**

# Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

# GUIDE 120

# **EMERGENCY RESPONSE**

## FIRE

- · Use extinguishing agent suitable for type of surrounding fire.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Allow substance to evaporate.
- · Ventilate the area.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · Vapors may cause dizziness or asphyxiation without warning.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Contact with liquefied gas may cause frostbite.

## FIRE OR EXPLOSION

- · Non-flammable gases.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

# Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

## FIRE

- · Use extinguishing agent suitable for type of surrounding fire.
- · Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Allow substance to evaporate.
- · Ventilate the area.

- Move victim to fresh air. Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · Substance does not burn but will support combustion.
- · Some may react explosively with fuels.
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Runoff may create fire or explosion hazard.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## HEALTH

- · Vapors may cause dizziness or asphyxiation without warning.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- · Fire may produce irritating and/or toxic gases.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

## EVACUATION

# Large Spill

· Consider initial downwind evacuation for at least 500 meters (1/3 mile).

#### Fire

## FIRE

· Use extinguishing agent suitable for type of surrounding fire.

#### **Small Fires**

Dry chemical or CO<sub>2</sub>.

## Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Do not direct water at spill or source of leak.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Allow substance to evaporate.
- · Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- · Clothing frozen to the skin should be thawed before being removed.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH.

- · TOXIC; may be fatal if inhaled or absorbed through skin.
- Vapors may be irritating.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control may cause pollution.

## FIRE OR EXPLOSION

- · Some may burn, but none ignite readily.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## **PUBLIC SAFETY**

- · CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- · Stav upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

# **EVACUATION**

## Spill

 See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

# FIRE

## **Small Fires**

Dry chemical or CO<sub>2</sub>.

## Large Fires

- · Water spray, fog or regular foam.
- · Do not get water inside containers.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.
- · Isolate area until gas has dispersed.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · TOXIC; may be fatal if inhaled or absorbed through skin.
- Fire will produce irritating, corrosive and/or toxic gases.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Runoff from fire control may cause pollution.

## FIRE OR EXPLOSION

- Substance does not burn but will support combustion.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- These are strong oxidizers and will react vigorously or explosively with many materials including fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Some will react violently with air, moist air and/or water.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- · Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

# **EVACUATION**

# Spill

· See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

# Small Fires: Water only; no dry chemical, CO, or Halon®.

- · Contain fire and let burn. If fire must be fought, water spray or fog is recommended.
- · Do not get water inside containers.
- · Move containers from fire area if you can do it without risk.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- · Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not direct water at spill or source of leak.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- · Ventilate the area.

- Move victim to fresh air.
   Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce
  artificial respiration with the aid of a pocket mask equipped with a one-way valve or other
  proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- · Clothing frozen to the skin should be thawed before being removed.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · TOXIC; may be fatal if inhaled.
- · Vapors are extremely irritating and corrosive.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control may cause pollution.

## FIRE OR EXPLOSION

- · Some may burn, but none ignite readily.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Some of these materials may react violently with water.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- · Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

# **EVACUATION**

# Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

# FIRE

## **Small Fires**

Dry chemical or CO<sub>2</sub>.

## Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Do not get water inside containers.
- · Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- · Isolate area until gas has dispersed.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · Some may burn, but none ignite readily.
- · Containers may explode when heated.
- · Ruptured cylinders may rocket.

## HEALTH

- · Vapors may cause dizziness or asphyxiation without warning.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- · Fire may produce irritating, corrosive and/or toxic gases.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

# Large Spill

• Consider initial downwind evacuation for at least 500 meters (1/3 mile).

#### Fire

# GASES - COMPRESSED OR LIQUEFIED (INCLUDING REFRIGERANT GASES)

GUIDE 126

# **EMERGENCY RESPONSE**

## FIRE

· Use extinguishing agent suitable for type of surrounding fire.

## **Small Fires**

· Dry chemical or CO<sub>2</sub>.

## Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- · Some of these materials, if spilled, may evaporate leaving a flammable residue.

## SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Do not direct water at spill or source of leak.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- · Ventilate the area.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

# FLAMMABLE LIQUIDS (POLAR/WATER-MISCIBLE)

# POTENTIAL HAZARDS

## FIRE OR EXPLOSION

- · HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- · Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion hazard indoors, outdoors or in sewers.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- · Many liquids are lighter than water.

## HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- · Runoff from fire control may cause pollution.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# EVACUATION

# Large Spill

Consider initial downwind evacuation for at least 300 meters (1000 feet).

#### Fire

## FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

#### **Small Fires**

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

## Large Fires

- · Water spray, fog or alcohol-resistant foam.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- · Use clean non-sparking tools to collect absorbed material.

# Large Spills

- · Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Wash skin with soap and water.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- · Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion hazard indoors, outdoors or in sewers.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- · Many liquids are lighter than water.
- · Substance may be transported hot.

## HEALTH

- · Inhalation or contact with material may irritate or burn skin and eyes.
- · Fire may produce irritating, corrosive and/or toxic gases.
- · Vapors may cause dizziness or suffocation.
- · Runoff from fire control or dilution water may cause pollution.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

# Large Spill

Consider initial downwind evacuation for at least 300 meters (1000 feet).

#### Fire

## FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

## **Small Fires**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

## Large Fires

- · Water spray, fog or regular foam.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- · ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

# Large Spills

- · Dike far ahead of liquid spill for later disposal.
- · Water spray may reduce vapor; but may not prevent ignition in closed spaces.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- · Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion hazard indoors, outdoors or in sewers.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- · Many liquids are lighter than water.

## HEALTH

- · May cause toxic effects if inhaled or absorbed through skin.
- · Inhalation or contact with material may irritate or burn skin and eyes.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Vapors may cause dizziness or suffocation.
- · Runoff from fire control or dilution water may cause pollution.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# EVACUATION

# Large Spill

· Consider initial downwind evacuation for at least 300 meters (1000 feet).

#### Fire

## FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires • Dry chemical, CO2, water spray or alcohol-resistant foam.

 Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane.

## Large Fires

- · Water spray, fog or alcohol-resistant foam.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- · A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion hazard indoors, outdoors or in sewers.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- · Many liquids are lighter than water.

## HEALTH

- · May cause toxic effects if inhaled or absorbed through skin.
- · Inhalation or contact with material may irritate or burn skin and eyes.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Vapors may cause dizziness or suffocation.
- · Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

# EVACUATION

# Large Spill

· Consider initial downwind evacuation for at least 300 meters (1000 feet).

## Fire

# FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

#### **Small Fires**

· Dry chemical, CO2, water spray or regular foam.

## Large Fires

- · Water spray, fog or regular foam.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- · Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

· Water spray may reduce vapor; but may not prevent ignition in closed spaces.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Wash skin with soap and water.
- · Keep victim warm and quiet.
- · Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · TOXIC; may be fatal if inhaled, ingested or absorbed through skin.
- · Inhalation or contact with some of these materials will irritate or burn skin and eyes.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Vapors may cause dizziness or suffocation.
- · Runoff from fire control or dilution water may cause pollution.

## FIRE OR EXPLOSION

- · HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors may form explosive mixtures with air.
- · Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapor explosion and poison hazard indoors, outdoors or in sewers.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- · Many liquids are lighter than water.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

# EVACUATION

# Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

### Fire

# FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires • Dry chemical, CO2, water spray or alcohol-resistant foam.

## Large Fires

- · Water spray, fog or alcohol-resistant foam.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.
- · Do not use straight streams.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- · Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.

Small Spills • Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

• Use clean non-sparking tools to collect absorbed material.

Large Spills . Dike far ahead of liquid spill for later disposal.

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

- Move victim to fresh air. Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Wash skin with soap and water.
- · Keep victim warm and quiet.
- · Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · Flammable/combustible materials.
- · May be ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Runoff to sewer may create fire or explosion hazard.
- · Containers may explode when heated.
- · Many liquids are lighter than water.

## HEALTH

- · May cause toxic effects if inhaled or ingested/swallowed.
- · Contact with substance may cause severe burns to skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- · Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

# PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

# Large Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

· Some of these materials may react violently with water.

Small Fires • Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

## Large Fires

- · Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.
- · Do not get water inside containers.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- · Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · A vapor suppressing foam may be used to reduce vapors.
- Absorb with earth, sand or other non-combustible material and transfer to containers (except for Hydrazine).
- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

· Water spray may reduce vapor; but may not prevent ignition in closed spaces.

- Move victim to fresh air.
   Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · Flammable/combustible material.
- · May be ignited by friction, heat, sparks or flames.
- · Some may burn rapidly with flare burning effect.
- Powders, dusts, shavings, borings, turnings or cuttings may explode or burn with explosive violence.
- · Substance may be transported in a molten form.
- · May re-ignite after fire is extinguished.

## HEALTH

- · Fire may produce irritating and/or toxic gases.
- · Contact may cause burns to skin and eyes.
- · Contact with molten substance may cause severe burns to skin and eyes.
- · Runoff from fire control may cause pollution.

# **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.

# PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

# **EVACUATION**

# Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

### FIRE

#### **Small Fires**

Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

### Large Fires

- · Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- · Cool containers with flooding quantities of water until well after fire is out.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.

### **Small Dry Spills**

 With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

### Large Spills

- Wet down with water and dike for later disposal.
- · Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Removal of solidified molten material from skin requires medical assistance.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · Flammable/combustible material.
- · May be ignited by heat, sparks or flames.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers
  explosion hazards.
- · Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated.

### HEALTH

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- · Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Stay upwind.
- · Keep unauthorized personnel away.
- · Keep out of low areas.
- · Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Large Spill

Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

## FIRE

### **Small Fires**

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

### Large Fires

- · Water spray, fog or alcohol-resistant foam.
- · Move containers from fire area if you can do it without risk.
- · Do not use straight streams.
- · Do not get water inside containers.
- · Dike fire control water for later disposal; do not scatter the material.

### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Prevent entry into waterways, sewers, basements or confined areas.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- · Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · Flammable/combustible material.
- · May ignite on contact with air or moist air.
- May burn rapidly with flare-burning effect.
- Some react vigorously or explosively on contact with water.
- · Some may decompose explosively when heated or involved in a fire.
- · May re-ignite after fire is extinguished.
- Runoff may create fire or explosion hazard.

### HEALTH

- · Fire will produce irritating, corrosive and/or toxic gases.
- · Inhalation of decomposition products may cause severe injury or death.
- · Contact with substance may cause severe burns to skin and eyes.
- · Runoff from fire control may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- · Stay upwind.
- · Keep unauthorized personnel away.
- · Keep out of low areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

### FIRE

- DO NOT USE WATER, CO, OR FOAM ON MATERIAL ITSELF.
- · Some of these materials may react violently with water.

#### **Small Fires**

· Dry chemical, soda ash, lime or DRY sand.

### Large Fires

· DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.

CAUTION: Dithionite (Hydrosulfite/Hydrosulphite) fires may require flooding with water in order to eliminate hazardous reaction since the materials generate their own oxygen.

· Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers or in contact with substance.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- · Fully encapsulating, vapor protective clothing should be worn for spills and leak with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.

## Small Spills

- Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · Extremely flammable; will ignite itself if exposed to air.
- · Burns rapidly, releasing dense, white, irritating fumes.
- · Substance may be transported in a molten form.
- · May re-ignite after fire is extinguished.

### HEALTH

- · Fire will produce irritating, corrosive and/or toxic gases.
- TOXIC; ingestion of substance or inhalation of decomposition products will cause severe
  injury or death.
- · Contact with substance may cause severe burns to skin and eyes.
- · Some effects may be experienced due to skin absorption.
- · Runoff from fire control may be corrosive and/or toxic and cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- · Stay upwind.
- · Keep unauthorized personnel away.
- Keep out of low areas.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Spill

· Consider initial downwind evacuation for at least 300 meters (1000 feet).

#### Fire

## FIRE

#### **Small Fires**

· Water spray, wet sand or wet earth.

### Large Fires

- · Water spray or fog.
- · Do not scatter spilled material with high pressure water streams.
- · Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.

### **Small Spills**

· Cover with water, sand or earth. Shovel into metal container and keep material under water.

## Large Spills

- · Dike for later disposal and cover with wet sand or earth.
- · Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- In case of contact with substance, keep exposed skin areas immersed in water or covered with wet bandages until medical attention is received.
- · Removal of solidified molten material from skin requires medical assistance.
- Remove and isolate contaminated clothing and shoes at the site and place in metal container filled with water. Fire hazard if allowed to dry.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- · Contact with molten substance may cause severe burns to skin and eyes.
- Runoff from fire control or dilution water may cause pollution.

### FIRE OR EXPLOSION

- · Some of these materials may burn, but none ignite readily.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Substance will react with water (some violently), releasing corrosive and/or toxic gases.
- Flammable/toxic gases may accumulate in confined areas (basement, tanks, hopper/tank cars etc.).
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.
- Substance may be transported in a molten form.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- · Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- $\bullet \ \ \text{We ar chemical protective clothing which is specifically recommended by the manufacturer}.$
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

### Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

### FIRE

· When material is not involved in fire: do not use water on material itself.

### **Small Fires**

- · Dry chemical or CO<sub>2</sub>.
- · Move containers from fire area if you can do it without risk.

### Large Fires

Flood fire area with large quantities of water, while knocking down vapors with water fog.
If insufficient water supply: knock down vapors only.

### Fire involving Tanks or Car/Trailer Loads

- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- · Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Small Spills Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.
- · Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Removal of solidified molten material from skin requires medical assistance.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · Produce flammable gases on contact with water.
- · May ignite on contact with water or moist air.
- · Some react vigorously or explosively on contact with water.
- · May be ignited by heat, sparks or flames.
- · May re-ignite after fire is extinguished.
- · Some are transported in highly flammable liquids.
- · Runoff may create fire or explosion hazard.

### HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe
  injury or death.
- · May produce corrosive solutions on contact with water.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- · Ventilate the area before entry.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

### **EVACUATION**

## Large Spill

· Consider initial downwind evacuation for at least 250 meters (800 feet).

#### Fire

### FIRE

DO NOT USE WATER OR FOAM.

### **Small Fires**

· Dry chemical, soda ash, lime or sand.

### Large Fires

- · DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- · Move containers from fire area if you can do it without risk.

Magnesium Fires • DRY sand, sodium chloride powder, graphite powder or Met-L-X® powder.

Lithium Fires

• DRY sand, sodium chloride powder, graphite powder, copper powder or Lith-X® powder.

### Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- DO NOT GET WATER on spilled substance or inside containers.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

• Dike for later disposal; do not apply water unless directed to do so.

Powder Spills • Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

 DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · Produce flammable and toxic gases on contact with water.
- · May ignite on contact with water or moist air.
- · Some react vigorously or explosively on contact with water.
- · May be ignited by heat, sparks or flames.
- · May re-ignite after fire is extinguished.
- · Some are transported in highly flammable liquids.
- · Runoff may create fire or explosion hazard.

### HEALTH

- · Highly toxic: contact with water produces toxic gas, may be fatal if inhaled.
- Inhalation or contact with vapors, substance, or decomposition products may cause severe
  injury or death.
- · May produce corrosive solutions on contact with water.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- · Ventilate the area before entry.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Large Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

GUIDE 139

## **EMERGENCY RESPONSE**

### FIRE

DO NOT USE WATER OR FOAM.

### **Small Fires**

· Dry chemical, soda ash, lime or sand.

### Large Fires

- · DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- FOR CHLOROSILANES, use AFFF alcohol-resistant medium expansion foam;
   DO NOT USE dry chemicals, soda ash or lime on chlorosilane fires as they may release large quantities of hydrogen gas which may explode.
- · Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- DO NOT GET WATER on spilled substance or inside containers.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- FOR CHLOROSILANES, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- Small Spills Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Dike for later disposal; do not apply water unless directed to do so.
- **Powder Spills** Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- · Move victim to fresh air. · Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- These substances will accelerate burning when involved in a fire.
- Some may decompose explosively when heated or involved in a fire.
- · May explode from heat or contamination.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- Inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe
  injury, burns, or death.
- · Fire may produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- · Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Large Spill

Consider initial downwind evacuation for at least 100 meters (330 feet).

### Fire

## FIRE

### Small Fires

• Do not use dry chemicals, CO2, Halon® or foams. Use water only.

### Large Fires

- · Flood fire area with water from a distance.
- · Move containers from fire area if you can do it without risk.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Do not get water inside containers.

### **Small Dry Spills**

 With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

## **Small Liquid Spills**

 Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

## Large Spills

- · Dike far ahead of liquid spill for later disposal.
- · Following product recovery, flush area with water.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · These substances will accelerate burning when involved in a fire.
- · May explode from heat or contamination.
- · Some may burn rapidly.
- · Some will react explosively with hydrocarbons (fuels).
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- · Toxic by ingestion.
- · Inhalation of dust is toxic.
- · Fire may produce irritating, corrosive and/or toxic gases.
- Contact with substance may cause severe burns to skin and eyes.
- Runoff from fire control or dilution water may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- · Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Large Spill

Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

### FIRE

#### **Small Fires**

· Do not use dry chemicals, CO2, Halon® or foams. Use water only.

### Large Fires

- · Flood fire area with water from a distance.
- · Move containers from fire area if you can do it without risk.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.

### **Small Dry Spills**

 With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

### Large Spills

· Dike far ahead of spill for later disposal.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · These substances will accelerate burning when involved in a fire.
- · May explode from heat or contamination.
- · Some will react explosively with hydrocarbons (fuels).
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

#### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe injury, burns or death.
- · Fire may produce irritating, corrosive and/or toxic gases.
- Toxic/flammable fumes may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- · Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

### FIRE

#### **Small Fires**

· Do not use dry chemicals, CO2, Halon® or foams. Use water only.

### Large Fires

- · Flood fire area with water from a distance.
- · Move containers from fire area if you can do it without risk.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire hurn

### SPILL OR LEAK

- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Do not get water inside containers.

## **Small Liquid Spills**

 Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

## Large Spills

· Dike far ahead of liquid spill for later disposal.

- Move victim to fresh air. Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · May explode from friction, heat or contamination.
- · These substances will accelerate burning when involved in a fire.
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · Some will react explosively with hydrocarbons (fuels).
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- · Fire may produce irritating and/or toxic gases.
- Toxic fumes or dust may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- · Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

## **EVACUATION**

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

#### **Small Fires**

Do not use dry chemicals, CO<sub>2</sub>, Halon® or foams. Use water only.

### Large Fires

- · Flood fire area with water from a distance.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Move containers from fire area if you can do it without risk.
- Do not get water inside containers: a violent reaction may occur.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Dike fire-control water for later disposal.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Prevent entry into waterways, sewers, basements or confined areas.

### **Small Spills**

· Flush area with flooding quantities of water.

## Large Spills

• DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · React vigorously and/or explosively with water.
- · Produce toxic and/or corrosive substances on contact with water.
- · Flammable/toxic gases may accumulate in tanks and hopper cars.
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- TOXIC; inhalation or contact with vapor, substance, or decomposition products may cause severe injury or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

### Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

### FIRE

· DO NOT USE WATER OR FOAM.

#### **Small Fires**

· Dry chemical, soda ash or lime.

### Large Fires

- · DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn
- · Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- DO NOT GET WATER on spilled substance or inside containers.

## **Small Spills**

 Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

## Large Spills

• DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- Move victim to fresh air. Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
   Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · May explode from heat or contamination.
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · May be ignited by heat, sparks or flames.
- · May burn rapidly with flare-burning effect.
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- · Fire may produce irritating, corrosive and/or toxic gases.
- · Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- · Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

## EVACUATION

## Large Spill

· Consider initial evacuation for at least 250 meters (800 feet).

#### Fire

## FIRE

#### **Small Fires**

· Dry chemical, CO2, water spray or regular foam.

### Large Fires

- · Flood fire area with water from a distance.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Keep substance wet using water spray.
- · Stop leak if you can do it without risk.

## **Small Spills**

 Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

## Large Spills

- · Wet down with water and dike for later disposal.
- · Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- · Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · May explode from heat, shock, friction or contamination.
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · May be ignited by heat, sparks or flames.
- · May burn rapidly with flare-burning effect.
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- · Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- · Runoff from fire control or dilution water may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.

### PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Large Spill

· Consider initial evacuation for at least 250 meters (800 feet).

#### Fire

### FIRE

#### **Small Fires**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

### Large Fires

- · Flood fire area with water from a distance.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- · Stop leak if you can do it without risk.

### **Small Spills**

 Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

## Large Spills

- · Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- Move victim to fresh air. Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- · Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- · May explode from heat or contamination.
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · May be ignited by heat, sparks or flames.
- · May burn rapidly with flare-burning effect.
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- · Contact of vapor or substance with eyes may cause blindness within minutes.
- · Fire may produce irritating, corrosive and/or toxic gases.
- Toxic fumes or dust may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- · Runoff from fire control or dilution water may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Large Spill

· Consider initial evacuation for at least 250 meters (800 feet).

#### Fire

### FIRE

#### **Small Fires**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

### Large Fires

- · Flood fire area with water from a distance.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- · ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Keep substance wet using water spray.
- · Stop leak if you can do it without risk.

### **Small Spills**

 Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

## Large Spills

- · Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- · Move victim to fresh air. · Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- · Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- · May explode from heat, contamination or loss of temperature control.
- These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire.
- · May ignite combustibles (wood, paper, oil, clothing, etc.).
- · May ignite spontaneously if exposed to air.
- · May be ignited by heat, sparks or flames.
- · May burn rapidly with flare-burning effect.
- · Containers may explode when heated.
- · Runoff may create fire or explosion hazard.

### HEALTH

- · Fire may produce irritating, corrosive and/or toxic gases.
- · Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- · Runoff from fire control or dilution water may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- DO NOT allow the substance to warm up. Obtain liquid nitrogen, dry ice or ice for cooling. If none can be obtained, evacuate the area immediately.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- · Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Large Spill

· Consider initial evacuation for at least 250 meters (800 feet).

#### Fire

# ORGANIC PEROXIDES (HEAT AND CONTAMINATION SENSITIVE/TEMPERATURE CONTROLLED)

GUIDE 148

## **EMERGENCY RESPONSE**

### FIRE

### **Small Fires**

• Dry chemical, CO2, water spray or regular foam.

### Large Fires

- · Flood fire area with water from a distance.
- · Do not use straight streams.
- · Move containers from fire area if you can do it without risk.
- The temperature of the substance must be maintained at or below the "Control Temperature" at all times.
- · Do not move cargo or vehicle if cargo has been exposed to heat.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · BEWARE OF POSSIBLE CONTAINER EXPLOSION.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- · Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

## **Small Spills**

 Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

## Large Spills

- · Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- · Move victim to fresh air. · Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- · Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- Self-decomposition or self-ignition may be triggered by heat, chemical reaction, friction or impact.
- · May be ignited by heat, sparks or flames.
- · Some may decompose explosively when heated or involved in a fire.
- May burn violently. Decomposition may be self-accelerating and produce large amounts of gases.
- · Vapors or dust may form explosive mixtures with air.

### HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe
  injury or death.
- · May produce irritating, toxic and/or corrosive gases.
- · Runoff from fire control may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

## EVACUATION

## Large Spill

· Consider initial downwind evacuation for at least 250 meters (800 feet).

#### Fire

### FIRE

### **Small Fires**

• Dry chemical, CO2, water spray or regular foam.

## Large Fires

- · Flood fire area with water from a distance.
- · Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- . BEWARE OF POSSIBLE CONTAINER EXPLOSION.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.

### **Small Spills**

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### FIRE OR EXPLOSION

- Self-decomposition or self-ignition may be triggered by heat, chemical reaction, friction or impact.
- Self-accelerating decomposition may occur if the specific control temperature is not maintained.
- These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire.
- · May be ignited by heat, sparks or flames.
- · Some may decompose explosively when heated or involved in a fire.
- May burn violently. Decomposition may be self-accelerating and produce large amounts of gases.
- · Vapors or dust may form explosive mixtures with air.

### HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- · May produce irritating, toxic and/or corrosive gases.
- · Runoff from fire control may cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- DO NOT allow the substance to warm up. Obtain liquid nitrogen, dry ice or ice for cooling. If none can be obtained, evacuate the area immediately.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- · Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Large Spill

· Consider initial downwind evacuation for at least 250 meters (800 feet).

#### Fire

GUIDE 150

## **EMERGENCY RESPONSE**

## FIRE

### **Small Fires**

· Dry chemical, CO2, water spray or regular foam.

### Large Fires

- · Flood fire area with water from a distance.
- The temperature of the substance must be maintained at or below the "Control Temperature" at all times.
- · Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

- . BEWARE OF POSSIBLE CONTAINER EXPLOSION.
- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.

## **Small Spills**

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

- Move victim to fresh air. Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### HEALTH

- · Highly toxic, may be fatal if inhaled, swallowed or absorbed through skin.
- · Avoid any skin contact.
- · Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

#### FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- · Containers may explode when heated.
- · Runoff may pollute waterways.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

### **EVACUATION**

### Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

#### **Small Fires**

· Dry chemical, CO, or water spray.

#### Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.
- Do not use straight streams.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

## SPILL OR LEAK

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Cover with plastic sheet to prevent spreading.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- · DO NOT GET WATER INSIDE CONTAINERS.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- · Highly toxic, may be fatal if inhaled, swallowed or absorbed through skin.
- · Contact with molten substance may cause severe burns to skin and eyes.
- · Avoid any skin contact.
- · Effects of contact or inhalation may be delayed.
- · Fire may produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

#### FIRE OR EXPLOSION

- · Combustible material: may burn but does not ignite readily.
- · Containers may explode when heated.
- Runoff may pollute waterways.
- · Substance may be transported in a molten form.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

#### **Small Fires**

Dry chemical, CO, or water spray.

#### Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.
- · Do not use straight streams.

#### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

#### SPILL OR LEAK

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Cover with plastic sheet to prevent spreading.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- · DO NOT GET WATER INSIDE CONTAINERS.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- · Contact with molten substance may cause severe burns to skin and eyes.
- · Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- · Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

#### FIRE OR EXPLOSION

- · Combustible material: may burn but does not ignite readily.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers
  explosion hazards.
- · Some may polymerize (P) explosively when heated or involved in a fire.
- · Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated.
- · Runoff may pollute waterways.
- · Substance may be transported in a molten form.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- · Keep out of low areas.
- · Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## EVACUATION

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

#### **Small Fires**

Dry chemical, CO<sub>2</sub> or water spray.

## Large Fires

- · Dry chemical, CO2, alcohol-resistant foam or water spray.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

#### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- · Contact with molten substance may cause severe burns to skin and eyes.
- · Avoid any skin contact.
- · Effects of contact or inhalation may be delayed.
- · Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

#### FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- · Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.).
- · Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## EVACUATION

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

GUIDE 154

## **EMERGENCY RESPONSE**

## FIRE

#### **Small Fires**

Dry chemical, CO<sub>2</sub> or water spray.

## Large Fires

- · Dry chemical, CO2, alcohol-resistant foam or water spray.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.

#### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- · ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- · DO NOT GET WATER INSIDE CONTAINERS.

- Move victim to fresh air. Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### FIRE OR EXPLOSION

- · HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- · Vapors form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapors may travel to source of ignition and flash back.
- Substance will react with water (some violently) releasing flammable, toxic or corrosive
  gases and runoff.
- Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated or if contaminated with water.

#### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- · Bromoacetates and chloroacetates are extremely irritating/lachrymators.
- · Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- · Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## **EVACUATION**

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

#### FIRE

Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO2, dry chemical, dry sand, alcohol-resistant foam.

#### Large Fires

- · Water spray, fog or alcohol-resistant foam.
- FOR CHLOROSILANES, DO NOT USE WATER; use AFFF alcohol-resistant medium expansion foam.
- · Move containers from fire area if you can do it without risk.
- · Do not use straight streams.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

#### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · A vapor suppressing foam may be used to reduce vapors.
- FOR CHLOROSILANES, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- · DO NOT GET WATER on spilled substance or inside containers.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.
- Small Spills Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

- Move victim to fresh air.
   Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### FIRE OR EXPLOSION

- · Combustible material: may burn but does not ignite readily.
- Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers
  explosion hazards.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Vapors may travel to source of ignition and flash back.
- · Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated or if contaminated with water.

#### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- · Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- · Fire will produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.
- · Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## EVACUATION

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## SUBSTANCES - TOXIC AND / OR CORROSIVE (COMBUSTIBLE / WATER-SENSITIVE)

GUIDE 156

## **EMERGENCY RESPONSE**

#### FIRE

Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

#### Large Fires

- · Water spray, fog or alcohol-resistant foam.
- FOR CHLOROSILANES, DO NOT USE WATER; use AFFF alcohol-resistant medium expansion foam.
- · Move containers from fire area if you can do it without risk.
- · Do not use straight streams.

#### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

#### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · A vapor suppressing foam may be used to reduce vapors.
- FOR CHLOROSILANES, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- · DO NOT GET WATER on spilled substance or inside containers.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

 Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

- Move victim to fresh air.
   Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may
  cause severe injury, burns, or death.
- · Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- · Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

### FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars etc.).
- · Substance will react with water (some violently), releasing corrosive and/or toxic gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- · Contact with metals may evolve flammable hydrogen gas.
- · Containers may explode when heated or if contaminated with water.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Keep out of low areas.
- · Ventilate enclosed areas.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.

## EVACUATION

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

#### FIRE

· Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO<sub>2</sub> (except for Cyanides), dry chemical, dry sand, alcohol-resistant foam.

### Large Fires

- · Water spray, fog or alcohol-resistant foam.
- · Move containers from fire area if you can do it without risk.
- · Do not use straight streams.
- · Dike fire control water for later disposal; do not scatter the material.

### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

#### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- · DO NOT GET WATER INSIDE CONTAINERS.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- · Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

 Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- · Inhalation or contact with substance may cause infection, disease, or death.
- · Runoff from fire control may cause pollution.
- · Note: Damaged packages containing solid CO, as a refrigerant may produce water or frost from condensation of air. Do not touch this liquid as it could be contaminated by the contents of the parcel.

#### FIRE OR EXPLOSION

- · Some of these materials may burn, but none ignite readily.
- Some may be transported in flammable liquids.

## **PUBLIC SAFETY**

- · CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- · Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Obtain identity of substance involved.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

#### FIRE

#### **Small Fires**

· Dry chemical, soda ash, lime or sand.

#### Large Fires

- · Use extinguishing agent suitable for type of surrounding fire.
- · Move containers from fire area if you can do it without risk.
- · Do not scatter spilled material with high pressure water streams.

#### SPILL OR LEAK

- · Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Absorb with earth, sand or other non-combustible material.
- Cover damaged package or spilled material with damp towel or rag and keep wet with liquid bleach or other disinfectant.
- DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

#### FIRST AID

· Move victim to a safe isolated area.

## CAUTION: Victim may be a source of contamination.

- · Call emergency medical care.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- For further assistance, contact your local Poison Control Center.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

# 159

## POTENTIAL HAZARDS

#### HEALTH

- Inhalation of vapors or dust is extremely irritating.
- May cause burning of eyes and flow of tears.
- · May cause coughing, difficult breathing and nausea.
- · Brief exposure effects last only a few minutes.
- · Exposure in an enclosed area may be very harmful.
- · Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

#### FIRE OR EXPLOSION

- · Some of these materials may burn, but none ignite readily.
- · Containers may explode when heated.

## PUBLIC SAFETY

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- · Stav upwind.
- · Keep out of low areas.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

## **EVACUATION**

## Large Spill

Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

## FIRE

#### **Small Fires**

· Dry chemical, CO2, water spray or regular foam.

### Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material

#### Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Do not get water inside containers.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

#### SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.

## **Small Spills**

 Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

## Large Spills

- Dike far ahead of liquid spill for later disposal.
- · Prevent entry into waterways, sewers, basements or confined areas.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- · Keep victim warm and quiet.
- Effects should disappear after individual has been exposed to fresh air for approximately 10 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- · Vapors may cause dizziness or suffocation.
- Exposure in an enclosed area may be very harmful.
- · Contact may irritate or burn skin and eyes.
- Fire may produce irritating and/or toxic gases.
- · Runoff from fire control or dilution water may cause pollution.

#### FIRE OR EXPLOSION

- · Some of these materials may burn, but none ignite readily.
- · Most vapors are heavier than air.
- · Air/vapor mixtures may explode when ignited.
- · Container may explode in heat of fire.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- · Keep out of low areas.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

## **EVACUATION**

## Large Spill

Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

### FIRE

#### **Small Fires**

· Dry chemical, CO, or water spray.

#### Large Fires

- · Dry chemical, CO2, alcohol-resistant foam or water spray.
- · Move containers from fire area if you can do it without risk.
- · Dike fire control water for later disposal; do not scatter the material.

## Fire involving Tanks or Car/Trailer Loads

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- · ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Stop leak if you can do it without risk.

#### **Small Liquid Spills**

· Take up with sand, earth or other noncombustible absorbent material.

## Large Spills

- · Dike far ahead of liquid spill for later disposal.
- · Prevent entry into waterways, sewers, basements or confined areas.

- · Move victim to fresh air. · Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · For minor skin contact, avoid spreading material on unaffected skin.
- · Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## RADIOACTIVE MATERIALS (LOW LEVEL RADIATION)

## POTENTIAL HAZARDS

#### HEALTH

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- · Low-level radioactive material; very low radiation hazard to people.
- · Quantity of material presents low radiation hazard if released from package during accident.
- · Some radioactive materials cannot be detected by commonly available instruments.
- Packages do not have RADIOACTIVE I, II, or III labels. Some may have EMPTY labels or may have the word "Radioactive" in the package marking.
- If any radioactive contamination occurs, it will be extremely low level.

### FIRE OR EXPLOSION

- · Some of these materials may burn, but most do not ignite readily.
- · Radioactivity does not change flammability or other properties of materials.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Stay upwind.
- Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

## PROTECTIVE CLOTHING

 Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

## EVACUATION

## Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

 When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

#### FIRE

- · Presence of radioactive material will not change effectiveness of fire control techniques.
- · Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

#### **Small Fires**

• Dry chemical, CO<sub>2</sub>, water spray or regular foam.

#### Large Fires

· Water spray, fog (flooding amounts).

#### SPILL OR LEAK

· Do not touch damaged packages or spilled material.

## Liquid Spills

- · Cover with sand, earth or other noncombustible absorbent material.
- · Cover powder spill with plastic sheet or tarp to minimize spreading.

- · Medical problems take priority over radiological concerns.
- · Use first aid treatment according to the nature of the injury.
- · Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external and/or internal radiation exposure.
- Low radiation hazard when material is inside container. If material is released from package
  or bulk container, hazard will vary from low to moderate. Level of hazard will depend on the
  type and amount of radioactivity, the kind of material it is in, and/or the surfaces it is on.
- Some material may be released from packages during accidents of moderate severity. This
  poses little risk to people.
- · Released radioactive materials or contaminated objects usually will be visible if packaging fails.
- Some exclusive use shipments of bulk and packaged materials will not have "RADIOACTIVE" labels.
   Placards, markings, and shipping papers provide identification.
- Some packages may have a "RADIOACTIVE" label and a second hazard label. The second hazard is usually greater than the radiation hazard; so follow this Guide as well as the response Guide for the second hazard class label.
- · Some radioactive materials cannot be detected by commonly available instruments.
- · Runoff from control of cargo fire may cause low-level pollution.

### FIRE OR EXPLOSION

- · Some of these materials may burn, but most do not ignite readily.
- Uranium and Thorium metal cuttings or granules may ignite spontaneously if exposed to air (see Guide 136).
- Nitrates are oxidizers and may ignite other combustibles (see Guide 141).

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
   Stay upwind.
   Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

## PROTECTIVE CLOTHING

 Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

## EVACUATION

## Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

 When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

#### FIRE

- · Presence of radioactive material will not change effectiveness of fire control techniques.
- · Move containers from fire area if you can do it without risk.
- · Do not move damaged packages; move undamaged packages out of fire zone.

#### **Small Fires**

• Dry chemical, CO2, water spray or regular foam.

#### Large Fires

- · Water spray, fog (flooding amounts).
- · Dike fire-control water for later disposal.

## SPILL OR LEAK

· Do not touch damaged packages or spilled material.

#### **Liquid Spills**

- · Cover with sand, earth or other noncombustible absorbent material.
- · Dike to collect large liquid spills.
- · Cover powder spill with plastic sheet or tarp to minimize spreading.

- · Medical problems take priority over radiological concerns.
- · Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## RADIOACTIVE MATERIALS (LOW TO HIGH LEVEL RADIATION)

## POTENTIAL HAZARDS

#### HEALTH

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external and/or internal radiation exposure.
- Type A packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Partial releases might be expected if "Type A" packages are damaged in moderately severe accidents.
- Type B packages (large and small, usually metal) identified as "Type B" by marking on packages or by shipping papers contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, life endangering releases are not expected in accidents involving "Type B" packages except those of utmost severity.

 Radioactive White-I labels indicate radiation levels outside undamaged packages are very low (less than 0.005 mSv/h (0.5 mrem/h)).

- Radioactive Yellow-II and Yellow-III labeled packages have higher radiation levels. The transport index (TI) on the label identifies the maximum radiation level in mrem/h one meter from the package.
- · Some radioactive materials cannot be detected by commonly available instruments.
- · Water from cargo fire control may cause pollution.

#### FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- · Radioactivity does not change flammability or other properties of materials.
- Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F) for a period of 30 minutes.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
   Stay upwind.
   Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

## PROTECTIVE CLOTHING

Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters'
protective clothing will provide adequate protection against internal radiation exposure, but
not external radiation exposure.

## **EVACUATION**

## Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

 When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

## GUIDE 163

## **EMERGENCY RESPONSE**

#### FIRE

- · Presence of radioactive material will not change effectiveness of fire control techniques.
- · Move containers from fire area if you can do it without risk.
- · Do not move damaged packages; move undamaged packages out of fire zone.

#### **Small Fires**

• Dry chemical, CO<sub>a</sub>, water spray or regular foam.

## Large Fires

- Water spray, fog (flooding amounts).
- · Dike fire-control water for later disposal.

#### SPILL OR LEAK

- · Do not touch damaged packages or spilled material.
- Slightly damaged or damp outer surfaces seldom indicate failure of packaging since most have an inner container.

### **Liquid Spills**

· Cover with sand, earth or other noncombustible absorbent material.

- · Medical problems take priority over radiological concerns.
- · Use first aid treatment according to the nature of the injury.
- · Do not delay care and transport of a seriously injured person.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external radiation hazard.
- · Contamination and internal radiation hazards are not expected, but not impossible.
- Type A packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Radioactive sources may be released if "Type A" packages are damaged in moderately severe accidents.
- Type B packages (large and small, usually metal) identified as "Type B" by marking on packages or by shipping papers contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, life endangering releases are not expected in accidents involving "Type B" packages except those of utmost severity.
- Radioactive White-I labels indicate radiation levels outside undamaged packages are very low (less than 0.005 mSv/h (0.5 mrem/h)).
- Radioactive Yellow-II and Yellow-III labeled packages have higher radiation levels. The transport index (TI) on the label identifies the maximum radiation level in mrem/h one meter from the package.
- · Commonly available instruments can detect most of these materials.
- · Water from cargo fire control is not expected to cause pollution.

#### FIRE OR EXPLOSION

- · Packagings can burn completely without risk of content loss from sealed source capsule.
- · Radioactivity does not change flammability or other properties of materials.
- Radioactive source capsules and Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F).

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
   Stay upwind.
   Keep unauthorized personnel away.
- · Delay final cleanup until instructions or advice is received from Radiation Authority.

## PROTECTIVE CLOTHING

 Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

## **EVACUATION**

## Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

 When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

## RADIOACTIVE MATERIALS (SPECIAL FORM/ LOW TO HIGH LEVEL RADIATION)

GUIDE 164

## **EMERGENCY RESPONSE**

#### FIRE

- · Presence of radioactive material will not change effectiveness of fire control techniques.
- · Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

#### **Small Fires**

· Dry chemical, CO2, water spray or regular foam.

#### Large Fires

· Water spray, fog (flooding amounts).

#### SPILL OR LEAK

- · Do not touch damaged packages or spilled material.
- Slightly damaged or damp outer surfaces seldom indicate failure of packaging since most have an inner container.
- If source is identified as being out of package; stay away and await advice from Radiation Authority.

- · Medical problems take priority over radiological concerns.
- · Use first aid treatment according to the nature of the injury.
- · Do not delay care and transport of a seriously injured person.
- Persons exposed to special form sources are not likely to be contaminated with radioactive material.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.

## RADIOACTIVE MATERIALS (FISSILE/LOW TO HIGH LEVEL RADIATION)

## POTENTIAL HAZARDS

#### HEALTH

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external and/or internal radiation exposure.
- Packages (drums or boxes) identified as "Type AF" or "IF" by marking on packages or by shipping papers contain materials that are not life endangering if released. External radiation levels are low and packages are designed, evaluated, and tested to control releases and to prevent a fission chain reaction under severe transport accident conditions.
- Packages (metal and usually very heavy) identified as "Type B(U)F" or "B(M)F" by marking
  on packages or by shipping papers contain potentially life endangering amounts. Because of
  design, evaluation, and testing of packages, fission chain reactions are prevented and releases
  are not expected to be life endangering for all accidents except those of utmost severity.
- The transport index (TI) shown on labels or a shipping paper might not indicate the radiation level at one meter from the package; instead, it may indicate controls needed during transport because of the fissile properties of the materials.
- · Some radioactive materials cannot be detected by commonly available instruments.
- · Water from cargo fire control is not expected to cause pollution.

#### FIRE OR EXPLOSION

- These materials are not flammable and packagings are designed to withstand fires without damage to contents.
- · Radioactivity does not change flammability or other properties of materials.
- Type AF, Type IF, and Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F) for a period of 30 minutes.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
   Stay upwind.
   Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

## PROTECTIVE CLOTHING

Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters'
protective clothing will provide adequate protection against internal radiation exposure, but
not external radiation exposure.

## **EVACUATION**

#### Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

 When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

## RADIOACTIVE MATERIALS (FISSILE/LOW TO HIGH LEVEL RADIATION)

GUIDE 165

## **EMERGENCY RESPONSE**

## FIRE

- · Presence of radioactive material will not change effectiveness of fire control techniques.
- Move containers from fire area if you can do it without risk.
- · Do not move damaged packages; move undamaged packages out of fire zone.

#### **Small Fires**

• Dry chemical, CO2, water spray or regular foam.

#### Large Fires

· Water spray, fog (flooding amounts).

#### SPILL OR LEAK

- · Do not touch damaged packages or spilled material.
- Slightly damaged or damp outer surfaces seldom indicate failure of packaging since most have an inner container.

#### **Liquid Spills**

 Package contents are seldom liquid. If any radioactive contamination resulting from a liquid release is present, it probably will be low-level.

- · Medical problems take priority over radiological concerns.
- · Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## HEALTH

- · Chemical hazard greatly exceeds radiation hazard.
- Substance reacts with water and water vapor in air to form toxic and corrosive hydrogen fluoride gas and an extremely irritating and corrosive, white-colored, water-soluble residue.
- · If inhaled, may be fatal.
- · Direct contact causes chemical burns to skin, eyes, and respiratory tract.
- · Low-level radioactive material; very low radiation hazard to people.
- · Runoff from control of cargo fire may cause low-level pollution.
- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.

#### FIRE OR EXPLOSION

- · Substance does not burn.
- Containers in protective overpacks (Horizontal cylindrical shape with short legs for tie-downs), also identified as "Type AF" or "B(U)F" on shipping papers or by marking on the overpack, are designed and evaluated to withstand severe accidents including total engulfment in flames at temperatures of 800°C (1475°F).
- Container may explode in heat of fire. The material may react violently with fuels.
- · Radioactivity does not change flammability or other properties of materials.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
   Stay upwind.
   Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

## **EVACUATION**

## Large Spill

Consider initial downwind evacuation for at least 100 meters (330 feet).

#### Fire

 When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

# RADIOACTIVE MATERIALS - CORROSIVE (URANIUM HEXAFLUORIDE/WATER-SENSITIVE)

GUIDE 166

## **EMERGENCY RESPONSE**

#### FIRE

- DO NOT USE WATER OR FOAM ON MATERIAL ITSELF.
- · Move containers from fire area if you can do it without risk.

#### **Small Fires**

· Dry chemical or CO,.

#### Large Fires

- · Water spray, fog or regular foam.
- · Cool containers with flooding quantities of water until well after fire is out.
- · If this is impossible, withdraw from area and let fire burn.
- · ALWAYS stay away from the ends of tanks.

#### SPILL OR LEAK

- · Do not touch damaged packages or spilled material.
- Without fire or smoke, leak will be evident by visible and irritating vapors and residue forming at the point of release.
- Use fine water spray to reduce vapors; do not put water directly on point of material release from container.
- · Residue buildup may self-seal small leaks.
- · Dike far ahead of spill to collect runoff water.

- · Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- · TOXIC; may be fatal if inhaled.
- · Vapors are extremely irritating.
- · Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- · Runoff from fire control may cause pollution.

#### FIRE OR EXPLOSION

- · Substance does not burn but will support combustion.
- This is a strong oxidizer and will react vigorously or explosively with many materials including fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- · Vapor explosion and poison hazard indoors, outdoors or in sewers.
- · Containers may explode when heated.
- Ruptured cylinders may rocket.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

## **EVACUATION**

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

## FIRE

#### **Small Fires**

· Dry chemical, soda ash, lime or sand.

### Large Fires

- · Water spray, fog (flooding amounts).
- · Do not get water inside containers.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks

- · Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

#### SPILL OR LEAK

- · Do not touch or walk through spilled material.
- If you have not donned special protective clothing approved for this material, do not expose
  yourself to any risk of this material touching you.
- · Do not direct water at spill or source of leak.
- A fine water spray remotely directed to the edge of the spill pool can be used to direct and maintain a hot flare fire which will burn the spilled material in a controlled manner.
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Isolate area until gas has dispersed.
- · Ventilate the area.

- · Move victim to fresh air. · Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
   Keep victim under observation.
- · Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### HEALTH

- · TOXIC; Extremely Hazardous.
- · Inhalation extremely dangerous; may be fatal.
- · Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- · Odorless, will not be detected by sense of smell.

### FIRE OR EXPLOSION

- EXTREMELY FLAMMABLE.
- · May be ignited by heat, sparks or flames.
- · Flame may be invisible.
- · Vapors may travel to source of ignition and flash back.
- · Containers may explode when heated.
- · Vapor explosion and poison hazard indoors, outdoors or in sewers.
- · Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- · Runoff may create fire or explosion hazard.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
   It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not
  effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

## EVACUATION

## Spill

See the Table of Initial Isolation and Protective Action Distances for highlighted substances.
 For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

#### Fire

#### FIRE

DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

#### **Small Fires**

Dry chemical, CO<sub>2</sub> or water spray.

#### Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.

## Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- · Cool containers with flooding quantities of water until well after fire is out.
- · Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Isolate area until gas has dispersed.

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
   Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## FIRE OR EXPLOSION

- Substance is transported in molten form at a temperature above 705°C (1300°F).
- Violent reaction with water; contact may cause an explosion or may produce a flammable gas.
- · Will ignite combustible materials (wood, paper, oil, debris, etc.).
- · Contact with nitrates or other oxidizers may cause an explosion.
- Contact with containers or other materials, including cold, wet or dirty tools, may cause an
  explosion.
- · Contact with concrete will cause spalling and small pops.

#### HEALTH

- · Contact causes severe burns to skin and eyes.
- Fire may produce irritating and/or toxic gases.

## **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- · Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear flame retardant structural firefighters' protective clothing, including faceshield, helmet and gloves, this will provide limited thermal protection.

### **EMERGENCY RESPONSE**

### FIRE

- · Do Not Use Water, except in life threatening situations and then only in a fine spray.
- · Do not use halogenated extinguishing agents or foam.
- · Move combustibles out of path of advancing pool if you can do so without risk.
- Extinguish fires started by molten material by using appropriate method for the burning material; keep water, halogenated extinguishing agents and foam away from the molten material.

### SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · Do not attempt to stop leak, due to danger of explosion.
- · Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Substance is very fluid, spreads quickly, and may splash. Do not try to stop it with shovels or other objects.
- Dike far ahead of spill; use dry sand to contain the flow of material.
- · Where possible allow molten material to solidify naturally.
- Avoid contact even after material solidifies. Molten, heated and cold aluminum look alike; do not touch unless you know it is cold.
- · Clean up under the supervision of an expert after material has solidified.

### FIRST AID

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- For severe burns, immediate medical attention is required.
- Removal of solidified molten material from skin requires medical assistance.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.

### POTENTIAL HAZARDS

### FIRE OR EXPLOSION

- May react violently or explosively on contact with water.
- · Some are transported in flammable liquids.
- · May be ignited by friction, heat, sparks or flames.
- · Some of these materials will burn with intense heat.
- · Dusts or fumes may form explosive mixtures in air.
- · Containers may explode when heated.
- · May re-ignite after fire is extinguished.

### HEALTH

- · Oxides from metallic fires are a severe health hazard.
- Inhalation or contact with substance or decomposition products may cause severe injury or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control or dilution water may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- · Stay upwind.
- Keep unauthorized personnel away.

### PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

### EVACUATION

### Large Spill

Consider initial downwind evacuation for at least 50 meters (160 feet).

### Fire

 If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. NAERG96

### METALS (POWDERS, DUSTS, SHAVINGS, BORINGS, TURNINGS, OR CUTTINGS, ETC.)

GUIDE 170

### **EMERGENCY RESPONSE**

### FIRE

- DO NOT USE WATER, FOAM OR CO,.
- Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment (i.e., building, cargo hold, etc.).
- Use DRY sand, graphite powder, dry sodium chloride based extinguishers, G-1® or Met-L-X® powder.
- · Confining and smothering metal fires is preferable rather than applying water.
- · Move containers from fire area if you can do it without risk.

### Fire involving Tanks or Car/Trailer Loads

· If impossible to extinguish, protect surroundings and allow fire to burn itself out.

### SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.

### FIRST AID

- Move victim to fresh air. Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### **POTENTIAL HAZARDS**

### FIRE OR EXPLOSION

- · Some may burn but none ignite readily.
- Some may polymerize (P) explosively when heated or involved in a fire.
- · Containers may explode when heated.
- Some may be transported hot.

### HEALTH

- Inhalation of material may be harmful.
- · Contact may cause burns to skin and eyes.
- Inhalation of Asbestos dust may have a damaging effect on the lungs.
- Fire may produce irritating, corrosive and/or toxic gases.
- · Runoff from fire control may cause pollution.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- · Keep unauthorized personnel away.
- · Stay upwind.

### PROTECTIVE CLOTHING

- · Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

### **EVACUATION**

### Fire

 If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

### **EMERGENCY RESPONSE**

### FIRE

### **Small Fires**

• Dry chemical, CO2, water spray or regular foam.

### Large Fires

- · Water spray, fog or regular foam.
- · Move containers from fire area if you can do it without risk.
- · Do not scatter spilled material with high pressure water streams.
- · Dike fire-control water for later disposal.

### Fire involving Tanks

- · Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- · ALWAYS stay away from the ends of tanks.

### SPILL OR LEAK

- · Do not touch or walk through spilled material.
- · Stop leak if you can do it without risk.
- · Prevent dust cloud.
- · Avoid inhalation of asbestos dust.

### **Small Dry Spills**

 With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

### **Small Spills**

 Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

### Large Spills

- Dike far ahead of liquid spill for later disposal.
- Cover powder spill with plastic sheet or tarp to minimize spreading.
- · Prevent entry into waterways, sewers, basements or confined areas.

### FIRST AID

- Move victim to fresh air. Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### **POTENTIAL HAZARDS**

### HEALTH

- Inhalation of vapors or contact with substance will result in contamination and potential harmful effects.
- · Fire will produce irritating, corrosive and/or toxic gases.

### FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may react upon heating to produce corrosive and/or toxic fumes.
- · Runoff may pollute waterways.

### **PUBLIC SAFETY**

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- · Stay upwind.
- · Keep unauthorized personnel away.

### PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- · Structural firefighters' protective clothing will only provide limited protection.

### **EVACUATION**

### Large Spill

· Consider initial downwind evacuation for at least 100 meters (330 feet).

### Fire

 When any large container is involved in a fire, consider initial evacuation for 500 meters (1/3 mile) in all directions.

### **EMERGENCY RESPONSE**

### FIRE

- · Use extinguishing agent suitable for type of surrounding fire.
- · Do not direct water at the heated metal.

### SPILL OR LEAK

- · Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- · Stop leak if you can do it without risk.
- · Prevent entry into waterways, sewers, basements or confined areas.
- · Do not use steel or aluminium tools or equipment.
- Cover with earth, sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- · For mercury, use a mercury spill kit.
- Mercury spill areas may be subsequently treated with calcium sulphide/calcium sulfide or with sodium thiosulphate/sodium thiosulfate wash to neutralize any residual mercury.

### FIRST AID

- Move victim to fresh air.
   Call emergency medical care.
- · Apply artificial respiration if victim is not breathing.
- · Administer oxygen if breathing is difficult.
- · Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- · Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### **NOTES**

### INTRODUCTION TO THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

The Table of Initial Isolation and Protective Action Distances suggests distances useful to protect people from vapors resulting from spills involving dangerous goods which are considered poisonous/toxic by inhalation (PIH). The Table provides first responders with initial guidance until technically qualified emergency response personnel are available. Distances show areas likely to be affected during the first 30 minutes after materials are spilled and could increase with time.

The **Initial Isolation Zone** defines an area SURROUNDING the incident in which persons may be exposed to dangerous (upwind) and life threatening (downwind) concentrations of material. The **Protective Action Zone** defines an area DOWNWIND from the incident in which persons may become incapacitated and unable to take protective action and/or incur serious or irreversible health effects. The Table provides specific guidance for small and large spills occurring day or night.

Adjusting distances for a specific incident involves many interdependent variables and should be made only by personnel technically qualified to make such adjustments. For this reason, no precise guidance can be provided in this document to aid in adjusting the table distances; however, general guidance follows.

### **Factors That May Change the Protective Action Distances**

The Guide for a material clearly indicates the evacuation distance required to deal with a fragmentation hazard. If the material becomes involved in a FIRE, the toxic hazard may become less important than the fire or explosion hazard.

If more than one tank car, cargo tank, portable tank, or large cylinder involved in the incident is leaking, LARGE SPILL distances may need to be increased.

For material with a protective action distance of 11.0+ km (7.0+ miles), the actual distance can be larger in certain atmospheric conditions. If the dangerous goods vapor plume is channeled in a valley or between many tall buildings, distances may be larger than shown in the Table due to less mixing of the plume with the atmosphere. Daytime spills in regions with known strong inversions or snow cover, or occurring near sunset, accompanied by a steady wind, may require an increase in the protective action distance. When these conditions are present, airborne contaminants mix and disperse more slowly and may travel much farther downwind.

### Materials producing significant toxic vapors when spilled in water

Materials that react with water to produce toxic vapors are addressed by the appropriate 3-digit guide. Materials listed at the end of the Table produce significant toxic vapors when spilled in water. Only materials which produce sufficient toxic vapors to endanger the public beyond 0.5 km (1/3 mile) downwind of the spill are included. When spilled in water, materials on this list may generate a toxic vapor hazard which endangers the public up to 10 km (6.2 miles) downwind of the incident.

When a water reactive PIH producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a substantial distance.

### PROTECTIVE ACTION DECISION FACTORS TO CONSIDER

The choice of protective options for a given situation depends on a number of factors. For some cases, evacuation may be the best option; in others, in-place protection may be the best course. Sometimes, these two actions may be used in combination. In any emergency, officials need to quickly give the public instructions. The public will need continuing information and instructions while being evacuated or protected in-place.

Proper evaluation of the factors listed below will determine the effectiveness of evacuation or in-place protection. The importance of these factors can vary with emergency conditions. In specific emergencies, other factors may need to be identified and considered as well. This list indicates what kind of information may be needed to make the initial decision.

### The Dangerous Goods

- Degree of health hazard
- Amount involved
- Containment/control of release
- Rate of vapor movement

### The Population Threatened

- Location
- Number of people
- Time to evacuate or protect in-place
- · Ability to control evacuation or protect in-place
- Building types and availability
- Special institutions or populations, e.g., nursing homes, hospitals, prisons

### **Weather Conditions**

- Effect on vapor and cloud movement
- Potential for change
- · Effect on evacuation or protection in-place

### HOW TO USE THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

- (1) The responder should already have:
  - Identified the material by its ID Number and Name; (if an ID Number cannot be found, use the name of material index in the blue-bordered pages to locate that number.)

Read the Guide for that material and taken the emergency actions recommended:

Noted the wind direction.

- (2) Look in this Table (the green-bordered pages) for the ID Number and Name of the Material involved in the incident. Some ID Numbers have more than one shipping name listed—look for the specific name of the material. (If the shipping name is not known and the Table lists more than one name for the same ID Number, use the entry with the largest protective action distances.)
- (3) Determine if the incident involves a SMALL or LARGE spill and if DAY or NIGHT. Generally, a SMALL SPILL is one which involves a single, small package (i.e., up to a 208 liter [55 U.S. gallon] drum), a small cylinder, or a small leak from a large package. A LARGE SPILL is one which involves a spill from a large package, or multiple spills from many small packages. DAY is any time after sunrise and before sunset. NIGHT is any time between sunset and sunrise.

Zone

Initial Isolation

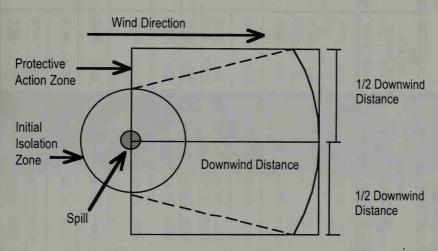
Distance

(4) Look up the initial ISOLATION distance. Direct all persons to move, in a crosswind direction, away from the spill to the distance specified—in meters and feet. Turn to the last green-bordered page if no distances are given and the material is spilled in water.

(5) Next, look up the initial PROTECTIVE ACTION DISTANCE shown in the Table. For a given dangerous goods, spill size, and whether day or night, the Table gives the downwind distance—in kilometers and miles—for which protective actions should be considered. For practical purposes, the Protective Action Zone (i.e., the area in which people are at risk of harmful exposure) is a square, whose length and width are the same as the downwind distance shown in the Table. Turn to the last green-bordered page if no distances are given and the material is spilled in water.

(6) Initiate Protective Actions to the extent possible, beginning with those closest to the spill site and working away from the site in the downwind direction. When a water-reactive PIH producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a substantial distance.

The shape of the area in which protective actions should be taken (the Protective Action Zone) is shown in this figure. The spill is located at the center of the small circle. The larger circle represents the INITIAL ISOLATION zone around the spill.



NOTE: See "Introduction To The Table Of Initial Isolation And Protective Action Distances" for factors which may increase or decrease Protective Action Distances.

Call the emergency response telephone number listed on the shipping paper, or the appropriate response agency as soon as possible for additional information on the material, safety precautions, and mitigation procedures.

First   Firs	Pa		113		SMALL SPILLS	PILLS					LARGE SPILLS	SPILLS		
NAME OF MATERIAL   First in all Directions   Particle	ge		(From	a small pack	kage or small	leak from a	large packa	ge)	F	rom a large p	ackage or fin	om many sr	nall packages	(5
NO.         NAME OF MATERIAL         Meters (Feet)         Kilometers (Miles)	_		Fir ISOL in all Dir	st ATE ections	Ders	The PROT	ECT wind durin	ė	ISOL in all Dir	St ATE ections	Del	PRO PRO	Then PROTECT Dersons Downwind during-	ė
Armonia, anhydrous         30 m         (100 ft)         0.2 km         (0.1 m)         0.3 km         (0.2 m)         95 m         (300 ft)         0.3 km           Armonia, anhydrous, liquefled than 50% Armonia anhydrous ammonia anhydrous ammonia anhydrous ammonia inquefled than 50% Armonia         30 m         (100 ft)         0.2 km         (0.1 m)         0.2 km         (0.1 m)         0.2 km         (0.1 m)         0.2 km         (0.1 m)         0.3 km         (300 ft)         0.2 km           Anhydrous ammonia, liquefled Anhydrous ammonia, liquefled Carbon monoxide         60 m         (200 ft)         0.2 km         (0.1 m)         0.5 km         (0.4 m)         185 m         (300 ft)         0.5 km           Carbon monoxide         30 m         (100 ft)         0.2 km         (0.1 m)         0.5 km         (300 ft)         0.5 km           Chlorine         Call gas, compressed         60 m         (200 ft)         0.2 km         (0.1 m)         0.2 km         (0.1 m)         0.2 km         (300 ft)         0.3 km           Cyanogen         Coal gas, compressed         60 m         (200 ft)         0.2 km         (0.1 m)         0.3 km         (300 ft)         0.3 km           Cyanogen gas         Ethylene oxide with Nitrogen         60 m         (200 ft)         0.2 km         (0.1 m) <th>_</th> <th>NAME OF MATERIAL</th> <th>Meters</th> <th>_</th> <th>DA Kilometers</th> <th>Y (Miles)</th> <th>NIG Kilometers</th> <th>HT (Miles)</th> <th>Meters</th> <th>_</th> <th>DA</th> <th>s (Miles)</th> <th>NIGHT Kilometers (Miles)</th> <th>HT S (Miles)</th>	_	NAME OF MATERIAL	Meters	_	DA Kilometers	Y (Miles)	NIG Kilometers	HT (Miles)	Meters	_	DA	s (Miles)	NIGHT Kilometers (Miles)	HT S (Miles)
Annydrous animonia solution, with more         30 m         (100 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         0.3 km         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         0.3 km         0.3 km         0.3 km           Carbon monoxide, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.0 ti)         0.3 km           Cyanogen gas         Ethylene oxide with Nitrogen         60 m         (200 ft)         0.2 km         (0.1 mi)	1005		30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	95 m	(300 ft)	0.3 km	(0.2 mi)	0.8 km	(0.5 mi)
Anhydrous ammonia, liquefied         30 m         (100 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         95 m         (300 ft)         0.3 km           Boron unfluoride Boron unfluoride, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.6 km         (0.4 mi)         95 m         (300 ft)         0.6 km           Carbon monoxide, compressed         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         95 m         (300 ft)         0.6 km           Chlorine         60 m         (200 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         95 m         (300 ft)         0.2 km           Cyanogen Cal gas, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         30 m         (100 ft)         0.3 km           Cyanogen gas         Elhylene oxide         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.3 km           Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.3 km           Hydrogen chloride, anh	1005		30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	m 09	(200 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)
Boron trifluoride         60 m         (200 ft)         0.2 km         (0.1 mi)         0.6 km         (0.4 mi)         185 m         (600 ft)         0.6 km           Carbon monoxide Coal gas         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         95 m         (300 ft)         0.2 km           Coal gas         Coal gas         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         30 m         (100 ft)         0.3 km           Cyanogen Coal gas         Coal gas         Coal gas         Coal gas         (0.1 mi)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         0.3 km         (100 ft)         0.3 km           Cyanogen Goal gas         Ethylene oxide with Nitrogen         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.5 km           Fluorine Compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.5 km           Hydrogen chloride, anhydrous         60 m         (200 ft)	1005		30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	95 m	(300 ft)	0.3 km	(0.2 mi)	0.8 km	(0.5 mi)
Carbon monoxide Carbon monoxide, compressed         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         95 m         (300 ft)         0.2 km           Chlorine         Carbon monoxide, compressed         60 m         (200 ft)         0.3 km         (0.2 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.3 km           Cyanogen, Iquefied Cyanogen, Iquefied Cyanogen gas         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.3 km           Fluorine Ethylene oxide with Nitrogen Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         185 m         (400 ft)         0.5 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         155 m         (400 ft)         0.5 km	1008		m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)
Chlorine         60 m         (200 ft)         0.3 km         (0.2 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.3 km           Coal gas, compressed         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         30 m         (100 ft)         0.3 km           Cyanogen         Cyanogen, liquefied         60 m         (200 ft)         0.3 km         (0.1 mi)         1.0 km         (0.6 mi)         215 m         (700 ft)         0.3 km           Ethylene oxide         Ethylene oxide with Nitrogen         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.3 km           Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.3 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         155 m         (400 ft)         0.5 km	1016		30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	95 m	(300 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)
Coal gas, compressed         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         30 m         (100 ft)         0.3 km           Cyanogen Cyanogen gas Ethylene oxide with Nitrogen Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         125 m         (400 ft)         0.3 km           Fluorine, compressed Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.5 mi)         125 m         (400 ft)         0.3 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         155 m         (400 ft)         0.3 km	1017	Chlorine	m 09	(200 ft)	0.3 km	(0.2 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.8 km	(0.5 mi)	3.1 km	(1.9 mi)
Cyanogen Cyanogen, liquefied Cyanogen gas         60 m         (200 ft)         0.3 km         (0.2 mi)         1.0 km         (0.6 mi)         215 m         (700 ft)         0.8 km           Ethylene oxide with Nitrogen Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (400 ft)         0.5 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         125 m         (400 ft)         0.3 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.5 km         (0.3 mi)         155 m         (500 ft)         0.5 km	1023		30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	30 m	(100 ft)	0.3 km	(0.2 mi)	0.8 km	(0.5 mi)
Ethylene oxide Ethylene oxide with Nitrogen         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         125 m         (400 ft)         0.3 km           Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.6 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         155 m         (400 ft)         0.5 km	1026 1026 1026		m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)
Fluorine Fluorine, compressed         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.6 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.3 mi)         155 m         (400 ft)         0.5 km	1040	1	m 09	(200 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	125 m	(400 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)
Hydrogen bromide, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.3 km         (0.2 mi)         125 m         (400 ft)         0.3 km           Hydrogen chloride, anhydrous         60 m         (200 ft)         0.2 km         (0.1 mi)         0.5 km         (0.3 mi)         155 m         (500 ft)         0.5 km	1045		m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)
Hydrogen chloride, anhydrous 60 m (200 ft) 0.2 km (0.1 mi) 0.5 km (0.3 mi) 155 m (500 ft) 0.5 km	1048		m 09	(200 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	125 m	(400 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)
	1050		m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.8 km	1.8 km (1.1 mi)

0.6 km (0.4 m) 2.7 km (1.7 m)	0.5 km (0.3 mi) 2.3 km (1.4 mi)	0.3 km (0.2 mi) 1.4 km (0.9 mi)	0.2 km (0.1 mi) 0.5 km (0.4 mi)	0.3 km (0.2 mi) 1.3 km (0.8 mi)	0.5 km (0.3 mi) 2.1 km (1.3 mi)	0.8 km (0.5 mi) 3.2 km (2.0 mi)	0.3 km (0.2 mi) 0.8 km (0.5 mi)	2.3 km (1.4 mi) 10.0 km (6.2 mi)	2.7 km (1.7 mi) 11.0+ km (7.0+ mi)
185 m (600 ft)	155 m (500 ft)	125 m (400 ft)	95 m (300 ft)	125 m (400 ft)	155 m (500 ft)	185 m (600 ft)	30 m (100 ft)	335 m (1100 ft)	365 m (1200 ft)
0.8 km (0.5 m))	0.6 km (0.4 mi)	0.5 km (0.3 mi)	0.3 km (0.2 mi)	0.5 km (0.3 mi)	0.6 km (0.4 mi)	1.0 km (0.6 mi)	0.2 km (0.1 mi)	2.7 km (1.7 mi)	3.4 km (2.1 mi)
0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	0.8 km (0.5 mi)
60 m (200 ft)	60 m (200 ft)	60 m (200 ft)	30 m (100 ft)	60 m (200 ft)	60 m (200 ft)	60 m (200 ft)	30 m (100 ft)	125 m (400 ft)	125 m (400 ft)
Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide Hydrocyanic acid, liquefied Hydrogen cyanide, anhydrous, stabilized Hydrogen cyanide, stabilized	Hydrogen fluoride, anhydrous	Hydrogen sulfide Hydrogen sulfide, liquefied Hydrogen sulphide Hydrogen sulphide, liquefied	Methyl bromide	Methyl mercaptan	Dinitrogen tetroxide Dinitrogen tetroxide, liquefied Nitrogen dioxide Nitrogen dioxide, liquefied Nitrogen peroxide, liquid Nitrogen tetroxide, liquid	Nitrosyl chloride	Oil gas Oil gas, compressed	Diphosgene (when "Inhalation Hazard" is on a package or shipping paper)	Sulfur dioxide Sulfur dioxide, liquefied Sulphur dioxide Sulphur dioxide, liquefied
1051	1052	1053 1053 1053	1062	1064	1067 1067 1067 1067 1067	1069	1071	1076	Page Page Page Page Page Page Page Page

"+" means distance can be larger in certain atmospheric conditions

		ı		SMALL SPILLS	PILLS					LARGE SPILLS	SPILLS	ĺ	ı
į		(From	From a small package or small leak from a large package)	age or small	leak from a	large packa	ge)	Ħ,	rom a large p	ackage or fro	om many sn	From a large package or from many small packages	0
٥		First ISOLATE in all Directions	First ISOLATE all Directions	sed	Then PROTECT ons Downwing	Then PROTECT persons Downwind during-	-6	First ISOLATE in all Directions	st ATE ections	ber	TI PRO Sons Dow	Then PROTECT persons Downwind during-	ģ
ુ ટું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	NIGHT Kilometers (Miles)	H (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y s (Miles)	NIGHT Kilometers (Miles)	HT s (Miles)
1082	Trifluorochloroethylene Trifluorochloroethylene, inhibited	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	95 m	(300 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)
1092	Acrolein, inhibited	125 m	(400 ft)	0.5 km	(0.3 mi)	2.3 km	(1.4 mi)	305 m	(1000 ft)	1.9 km	(1.2 mi)	8.4 km	(5.2 mi)
1098	Allyl alcohol	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)
1135	Ethylene chlorohydrin	95 m	(300 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)	275 m	(H) (1)	1.6 km	(1.0 mi)	6.9 km	(4.3 mi)
1143	Crotonaldehyde, inhibited Crotonaldehyde, stabilized	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)
1163	1,1-Dimethylhydrazine Dimethylhydrazine, unsymmetrical	125 m	(400 ft)	0.6 km	(0.4 mi)	3.1 km	(1.9 mi)	365 m	(1200 ft)	2.6 km	(1.6 mi)	(1.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
1182	Ethyl chloroformate	95 m	(300 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	4.3 km	(2.7 mi)
1185	Ethyleneimine, inhibited	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1238	Methyl chloroformate	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.5 km	(2.8 mi)
1239	Methyl chloromethyl ether	e0 m	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 ml)
1242	Methyldichlorosilane	DAN	DANGEROUS:	When spilled in water, see list at the end of	d in water,	see list at t		this table.					
1244	Methylhydrazine	125 m	(400 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)	400 m	(1300 ft)	2.9 km	(1.8 mi)	(1.8 mi) 11.0+ km	(7.0+ mi)
1250	Methyltrichlorosilane	DAN	DANGEROUS: When spilled in water, see list at the end of	When spille	d in water,	see list at t		this table.					
1251	Methyl vinyl ketone Methyl vinyl ketone, stabilized	185 m	(600 ft)	1.4 km	(0.9 mi)	6.3 km	(3.9 mi)	520 m	(1700 ft)	5.1 km	(3.2 mi)	11.0+ km	(7.0+ mi)
1259	Nickel carbonyl	125 m	(400 ft)	0.5 km	(0.3 mi)	2.4 km	(1.5 mi)	305 m	(1000 ft)	1.9 km	(1.2 mi)	8.7 km	(5.4 mi)

		I			i	ĺ		I					
1295	Trichlorosilane	DANG	GEROUS:	DANGEROUS: When spilled in water, see list at the end of	d in water,	see list at tl	ne end of	this table.		4			
1360	Calcium phosphide	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of	d in water,	see list at the	ne end of	this table.	-				
1380	Pentaborane	155 m	(500 ft)	1.0 km	(0.6 mi)	4.7 km	(2.9 mi)	460 m	(1500 ft)	3.9 km	(2.4 mi)	(2.4 mi) 11.0+ km	(7.0+ mi)
1397	Aluminum phosphide	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at the	ne end of	his table.					
1412	Lithium amide	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of	d in water,	see list at the	ne end of	this table.					- 1
1419	Magnesium aluminum phosphide	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of	d in water,	see list at tl	ne end of	this table.			I		
1432	Sodium phosphide	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at tl	ne end of	his table.					
1433	Stannic phosphides	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at tl	t e end of	his table.					
1471 1471 1471	Lithium hypochlorite, dry Lithium hypochlorite mixture Lithium hypochlorite mixtures, dry	DAN	GEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at th	ne end of t	his table.					
1510	Tetranitromethane	95 m	(300 ft)	0.3 km	(0.2 mi)	1.6 km	(1.0 mi)	275 m	(900 ft)	1.3 km	(0.8 mi)	5.8 km	(3.6 mi)
1541	Acetone cyanohydrin, stabilized	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1556	Methyldichloroarsine	m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)
1560	Arsenic chloride Arsenic trichloride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.7 km	(2.9 mi)
1569	Bromoacetone	95 m	(300 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	3.9 km	(2.4 mi)
1580	Chloropicrin	95 m	(300 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)	305 m	(1000 ft)	1.8 km	(1.1 mi)	7.7 km	(4.8 mi)
184 185 Page 303	Chloropicin and Methyl bromide mixture Methyl bromide and Chloropicin mixtures Methyl bromide and more than 2% Chloropicin mixture, liquid	E 98	(300 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)	305 m	(1000 ft)	1.8 km	(1.1 mi)	7.7 km	(4.8 mi)

"+" means distance can be larger in certain atmospheric conditions

		(From	Small pack	SMALL SPILLS From a small nackane or small back from a lame backane)	PILLS leak from a l	ame nackad	9	Ţ,	a lame	LARGE SPILLS	SPILLS	LARGE SPILLS From a larme markage or from mark small harkages!	
و ا		First ISOLATE in all Directions	ATE ctions	person	Then PROTECT ons Downwind	Then PROTECT persons Downwind during-		First ISOLATE in all Directions	ATE actions	ber	Th PRO sons Dow	Then PROTECT persons Downwind during-	ė,
⊇ <sup>¿</sup>	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	(Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y s (Miles)	NIGHT Kilometers (Miles)	HT (Miles)
1582	Chloropicin and Methyl chloride mixture Methyl chloride and Chloropicin mixtures	95 m	(300 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)	305 m	(1000 ft)	1.8 km	(1.1 mi)	7.7 km	7.7 km (4.8 mi)
1583	Chloropicin, absorbed (when "Inhalation Hazard" is on a package or shipping paper) Chloropicin mixture, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m	(300 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)	305 m	(1000 ft)	1.8 km	(1.1 mi)	7.7 km	(4.8 mi)
1589	Cyanogen chloride, inhibited	95 m	(300 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)	305 m	(1000 ft)	1.8 km	(1.1 mi)	7.9 km	(4.9 mi)
1595 1595	Dimethyl sulfate Dimethyl sulphate	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.1 km	(6.3 mi)
1605	Ethylene dibromide	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.3 km	(0.2 mi)	1.4 km	(im 6:0)
1612	Hexaethyl tetraphosphate and compressed gas mixture	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)
1613	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper) Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)	ш 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)

1614	Hydrogen cyanide, anhydrous, stabilized (absorbed) Hydrogen cyanide, stabilized (absorbed)	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.7 km	2.7 km (1.7 mi)
1647	Ethylene dibromide and Methyl bromide mixture, liquid Methyl bromide and Ethylene dibromide mixture, liquid	e0 m	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.3 km	(0.2 mi)	1.4 km	(im 6.0)
0991	Nitric oxide Nitric oxide, compressed	e0 m	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.6 km	(1.6 mi)
1670	Perchloromethyl mercaptan	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.7 km	(2.9 mi)
1672	Phenylcarbylamine chloride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)
1680	Potassium cyanide	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at the	ne end of	this table.					
1689	Sodium cyanide	DAN	DANGEROUS: When spilled in water, see list at the end of	When spille	d in water,	see list at tl	ne end of	this table.	H				
1695	Chloroacetone, stabilized	m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.2 km	(2.0 mi)
1703	Tetraethyl dithiopyrophosphate and gases, in solution Tetraethyl dithiopyrophosphate and gases, mixtures	125 m	(400 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)	365 m	(1200 ft)	2.4 km	(1.5 mi)	10.9 km	(6.8 mi)
1703	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.3 km	(1.4 mi)
1703	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)	365 m	(1200 ft)	2.4 km	(1.5 mi)	10.9 km	(6.8 mi)
1705	Tetraethyl pyrophosphate and compressed gas mixtures	155 m	(200 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)	460 m	(1500 ft)	4.0 km	(2.5 mi)	11.0+ km	(7.0+ mi)

+" means distance can be larger in certain atmospheric conditions

	The state of the s			The state of the s			
		(From a small pac	SMALL SPILLS  From a small package or small leak from a large package)	S om a large package)	(From a large)	LARGE SPILLS [From a large package or from many small packages]	nall packages)
9		First ISOLATE in all Directions	PF persons D	Then PROTECT persons Downwind during-	First ISOLATE in all Directions	Then PROTECT persons Downwin	Then PROTECT persons Downwind during-
을	NAME OF MATERIAL	Meters (Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters (Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1705	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)	60 m (200 ft)	0.2 km (0.1 mi)	mi) 0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
1705	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)	155 m (500 ft)	1.1 km (0.7 mi)	mi) 4.8 km (3.0 mi)	460 m (1500 ft)	4.0 km (2.5 mi)	(2.5 mi) 11.0+ km (7.0+ mi)
1714	Zinc phosphide	DANGEROUS:	When spilled in wa	DANGEROUS: When spilled in water, see list at the end of this table.	if this table.		1. 1.7
1716	Acetyl bromide	DANGEROUS:	When spilled in wa	DANGEROUS: When spilled in water, see list at the end of	of this table.		X
1717	Acetyl chloride	DANGEROUS:	When spilled in wa	DANGEROUS: When spilled in water, see list at the end of this table.	if this table.		
1722	Allyl chlorocarbonate Allyl chloroformate	95 m (300 ft)	0.3 km (0.2 mi)	mi) 1.6 km (1.0 mi)	245 m (800 ft)	1.3 km (0.8 mi)	5.8 km (3.6 mi)
1725	Aluminum bromide, anhydrous	DANGEROUS:	When spilled in wa	DANGEROUS: When spilled in water, see list at the end of this table.	f this table.		
1726	Aluminum chloride, anhydrous	DANGEROUS:	When spilled in wa	DANGEROUS: When spilled in water, see list at the end of this table.	if this table.		
1732	Antimony pentafluoride	DANGEROUS:	When spilled in wa	DANGEROUS: When spilled in water, see list at the end of this table.	if this table.		The last
1741	Boron trichloride	60 m (200 ft)	0.2 km (0.1 mi)	mi) 0.5 km (0.3 mi)	) 155 m (500 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
1744	Bromine	60 m (200 ft)	0.3 km (0.2 mi)	mi) 1.0 km (0.6 mi)	) 215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)
1744	Bromine, solution (when "Inhalation Hazard" is on a package or shipping paper)	30 m (100 ft)	0.2 km (0.1 mi)	mi) 0.6 km (0.4 mi)	125 m (400 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)
1745	Bromine pentafluoride	95 m (300 ft)	0.3 km (0.2 mi)	mi) 1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)

1746	Bromine trifluoride	95 m	(300 ft)	0.3 km	0.3 km (0.2 mi)	1.4 km (0.9 mi)	(0.9 mi)	245 m	(800 ft)	1.3 km	(0.8 mi)	5.3 km	(3.3 mi)
1748	Calcium hypochlorite, dry Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at t	he end of	this table.	fif	511	3(6)		
1749	Chlorine trifluoride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.7 km	(2.9 mi)
1752	Chloroacetyl chloride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	4.2 km	(2.6 mi)
1754 1754 1754 1754 1754	Chlorosulfonic acid Chlorosulfonic acid and Sulfur trioxide mixture Chlorosulphonic acid and Sulfur trioxide and Sulfur trioxide and Chlorosulfonic acid mixture	۳ 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	0.8 km (0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)
1758	Chromium oxychloride	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at th	ne end of	his table.		E			
1771 1771	Fluorosulfonic acid Fluorosulphonic acid	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at th	he end of	this table.			F		
1806	Phosphorus pentachloride	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at the	ne end of	his table.					
1809	Phosphorus trichloride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)
1810	Phosphorus oxychloride	m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)
1818	Silicon tetrachloride	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at the	ne end of	his table.					
Page 307	Sulfur chlorides Sulphur chlorides	m 09	(200 ft)	0.2 km	0.2 km (0.1 mi)	0.6 km (0.4 mi)	(0.4 mi)	155 m	(500 ft)	0.5 km (0.3 mi)	(0.3 mi)	2.3 km (1.4 m)	(1.4 mi)

		Q.V				1		2		1			
Pade		(Fron	SMALL SPILLS From a small backage or small leak from a large package.	SMALL SPILLS	PILLS leak from a	larne nackar	le)	. F	om a lame o	LARGE SPILLS	SPILLS	From a large backage or from many small parkages	۱
Name and Address of the Owner, where		Fin ISOL in all Di	First ISOLATE in all Directions	bers	Then PROTECT	Then PROTECT  persons Downwind during-		First ISOLATE in all Directions	ATE ections	bed	Then PROTECT Sons Downwing	Then PROTECT  persons Downwind during	
⊇ ટું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	T (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	NIGHT Kilometers (Miles)	IT (Miles)
1829 1829 1829 1829 1829 1829	Sulfur trioxide. Sulfur trioxide, inhibited Sulfur trioxide, stabilized Sulfur trioxide, uninhibited Sulphur trioxide, inhibited Sulphur trioxide, stabilized Sulphur trioxide, uninhibited	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 m)
1831 1831 1831 1831	Oleum. Oleum, with not less than 30% free Sulfur trioxide Oleum, with not less than 30% free Sulfur trioxide Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide Sulphuric acid, fuming, with not less than 30% free Sulfur trioxide Sulphuric acid, fuming, with not less than 30% free Sulfur trioxide	ш 09	(200 ft)	0.2 кт	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)
1834	Sulfuryl chloride Sulphuryl chloride	95 ш	(300 ft)	0.3 km	(0.2 mi)	1.1 km	1.1 km (0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	B.s.	3.9 km (2.4 mi)
1836	Thionyl chloride	DAN	DANGEROUS: When spilled in water, see list at the end of	When spiller	d in water,	see list at the		this table.			H		
1838	Titanium tetrachloride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)
1859	Silicon tetrafluoride Silicon tetrafluoride, compressed	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)
1892	Ethyldichloroarsine	95 m	(300 ft)	0.5 km	(0.3 mi)	1.6 km	(1.0 mi)	275 m	(900 ft)	1.4 km	(0.9 mi)	6.1 km	6.1 km (3.8 mi)

age 308

1963   Compressed gas, farmable,   125 m (400 ft)   1.9 km (1.2 m)   8.8 km (5.5 m)   3.9 km (100 ft)   1.9 km (1.2 m)   8.8 km (5.5 m)   3.9 km (100 ft)   1.9 km (1.2 m)   8.8 km (5.5 m)   1.9 km (1.2 m)   1				-									I		
1951 Diborane, compressed 125 m (400 ft) 0.5 km (0.3 m) 2.3 km (1.4 m) 305 m (1000 ft) 1.9 km (1.2 m) 8.4 km 1953 Compressed gas, flammable, no. s, (Inhalation box, no.s, (Inhalation box, Inhalation box, no.s, (Inhalation box, no.s, (Inhalation box, no	삗	868	Acetyl iodide	DAN	SEROUS:	When spille	d in water,	see list at the	he end of	this table.					
1963   Compressed gas, flammable,   125 m (400 ft)   1.9 km (12 m)   88 km (55 m)   610 m (2000 ft)   74 km (46 m)   110 km   110 km   110 km   148 km (21 m)   165 m (400 ft)   0.8 km (0.5 m)   3.4 km (2.1 m)   385 m (1200 ft)   2.7 km (1.7 m)   110 km   110 km   10.0 km   148 km	5.51	911	Diborane Diborane, compressed	125 m	(400 ft)	0.5 km	(0.3 mi)	2.3 km	(1.4 mi)	305 m	(1000 ft)	1.9 km	(1.2 mi)	8.4 km	(5.2 mi)
1963 Compressed gas, flarmrable, 125 m (400 ft) 0.8 km (0.5 mi) 3.4 km (2.1 mi) 365 m (1200 ft) 2.7 km (1.7 mi) 110+km 100 km 190sonous, no.8. (Inhalation Poisonous, n.o.8. (Inhalation Pazard Zone B) 1.3 km (0.2 mi) 1.3 km (0.8 mi) 2.7 km (1.7 mi) 3.35 m (1100 ft) 2.3 km (1.4 mi) 10.0 km 10.0 km (0.5 mi) 3.4 km (2.1 mi) 385 m (1200 ft) 2.7 km (1.7 mi) 11.0 km 10.0 km 10.0 km (0.5 mi) 3.4 km (2.1 mi) 385 m (1200 ft) 2.7 km (1.7 mi) 11.0 km 10.0 km 10.0 km (0.2 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 11.0 km 10.0 km 10.0 km (0.2 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.1 km (0.7 mi) 1.3 km (0.8 mi) 245 m (300 ft) 1.3 km (1.2 mi) 8.8 km (5.5 mi) 610 m (2000 ft) 7.4 km (4.6 mi) 11.0 km 10.0 km 1	5	953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
1953 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone C)  1963 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1963 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1963 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1964 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, flarmable, posonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone D)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone A)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone A)  1965 Compressed gas, poisonous, no.s. (Inhalation Hazard Zone A)	5	953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	-	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)		(7.0+ mi)
1953 Compressed gas, flammable, no.s. (Inhalation Hazard Zone B) 1954 Compressed gas, flammable, and the confinence of gas, flammable, and the con	9	953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)		(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)		(6.2 mi)
1953 Compressed gas, flammable, 1.5 fm (700 ft) 1.9 km (1.2 mi) 8.8 km (5.5 mi) 610 m (2000 ft) 7.4 km (4.6 mi) 11.0+ km brazerd Zone A)  1953 Compressed gas, flammable, 1.0.5. (Inhalation Hazard Zone D)  1953 Compressed gas, flammable, 1.0.5. (Inhalation Hazard Zone D)  1953 Compressed gas, flammable, 1.0.5. (Inhalation Hazard Zone D)  1953 Compressed gas, poisonous, 1954 Mazard Zone A)  1955 Compressed gas, poisonous, 1.2 fm (700 ft) 1.9 km (1.2 mi) 8.8 km (5.5 mi) 610 m (2000 ft) 7.4 km (4.6 mi) 11.0+ km 11.0	6	953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	
1953 Compressed gas, flammable, 125 m (400 ft) 0.8 km (0.5 mi) 3.4 km (2.1 mi) 365 m (1200 ft) 1953 Compressed gas, flammable, n.o.s. (Inhalation Hazard Zone D) 1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D) 1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D) 1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A) Hazard Zone A)	6	953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)		(7.0+ mi)
1953 Compressed gas, flammable, 125 m (400 ft) 0.6 km (0.4 mi) 2.7 km (1.7 mi) 335 m (1100 ft) 1953 Compressed gas, flammable, n.o.s. (Inhalation Hazard Zone D) 1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A) Hazard Zone A)	19	953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)		(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
1953 Compressed gas, flammable, 95 m (300 ft) 0.3 km (0.2 mi) 1.3 km (0.8 mi) 245 m (800 ft) toxic, n.o.s. (Inhalation Hazard Zone D)  1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)  1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	19	953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	- 1	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
1953 Compressed gas, poisonous, 15 m (700 ft) 1.9 km , (1.2 mi) 8.8 km (5.5 mi) 610 m (2000 ft) 1953 Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	19	953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)		(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	
		953	Compressed gas, poisonous, flammable, n.o.s. Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	. (1.2 mi)		(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mj)

H		(From	a small pack	SMALL SPILLS From a small package or small leak from a farm nackage.	PILLS	larne nacka	(90	ů,	o and c mo	LARGE SPILLS	SPILLS		
ءِ ا		First ISOLATE in all Directions	st ATE ections	bers	Then PROTECT	Then Then PROTECT PROT	-6	First ISOLATE in all Directions	st ATE ections	package of the	PRO Sons Dow	Tirst PROTECT  PROTECT  PROTECT  PROTECT  Province Derivative University Strain Marchados  PROTECT  PR	
e ge	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	NIGHT Kilometers (Miles)	HT s (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y s (Miles)	NIGHT Kilometers (Miles)	(Miles)
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ ml)
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
1953	Compressed gas, poisonous, farmable, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1953	Compressed gas, toxic, flammable, n.o.s. Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	1.9 km (1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	7.4 km (4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km		(1.7 mi) 11.0+ km	(7.0+ mi)
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km	2.3 km (1.4 mi)	10.0 km (6.2 mi)	(6.2 mi)
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	m 56	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)		4.8 km (3.0 mi)
1953	Liquefied gas, flammable, poisonous, n.o.s. Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)

\$	1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
5,	1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
25	1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
10 10	1953	Liquefied gas, flammable, toxic, n.o.s. Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 ті)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
5	1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
25	1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
25	1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
5 5	1953	Poisonous gas, flammable, n.o.s. Poisonous liquid, flammable, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
€ € Page 311	1955	Compressed gas, poisonous, n.o.s. Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 ml)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)

+" means distance can be larger in certain atmospheric conditions

			The second										
		Erom	you lema e	SMALL SPILLS	PILLS leak from a	sedoes ceacl	-	, i	o more	LARGE SPILLS	SPILLS	The second second	i
	THE REAL PROPERTY.	First ISOLATE	ATE	300	Then PROTECT	Then  PROTECT		First ISOLATE	ATE	dense of ite	PRO	iist Then Then Then Then Then Then Then Then	
<u> </u>	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT (Miles)	IT (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	DAY NIGHT Kilometers (Miles)	HT (Miles)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1955 1955	Compressed gas, toxic, n.o.s. Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2.mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1955 1955	Liquefied gas, poisonous, n.o.s. Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	. 610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
1955	Liquefied gas, poisonous, n.o.s. (inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
		I			I	I	Ī	I				Section 2	Section 1

Page 312

	The street of th												
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1955	Liquefied gas, toxic, n.o.s. Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
1955	Methyl bromide and nonflammable, nonliquefied compressed gas mixture	30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	95 m	(300 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)
1955 1955 1955	Organic phosphate compound mixed with compressed gas Organic phosphate mixed with compressed gas Organic phosphorus compound mixed with compressed gas	155 m	(500 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 ml)	460 m	(1500 ft)	4.0 km	(2.5 mi)	11.0+ km	(7.0+ mi)
1967	Insecticide gas, poisonous, n.o.s. Insecticide gas, toxic, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
L961 Pag	Parathion and compressed gas mixture	95 m	(300 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mj)	275 m	(900 ft)	1.4 km	(0.9 m)	6.8 km,	6.8 km, (4.2 ml)
e 313						W.		ш					

	2741	(From a	small pack	SMALL SPILLS From a small package or small leak from a large package)	PILLS leak from a	large packag	9	F.	om a large p	LARGE SPILLS ackage or from many s	SPILLS	LARGE SPILLS From a large package or from many small packages.	
ع		First ISOLATE in all Directions	TE	perse	Then PROTECT ONS Downwing	Then PROTECT persons Downwind during-	4	First ISOLATE in all Directions	st ATE ections	bed	Then PROTECT sons Downwing	Then PROTECT persons Downwind during-	
2 €	NAME OF MATERIAL	Meters (I	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	(Miles)	Meters	(Feet)	DAY Kilometers (Miles)	y (Miles)	NIGHT Kilometers (Miles)	(Miles)
1975	Dinitrogen tetroxide and Nitric oxide mixture Nitric oxide and Dinitrogen letroxide and Linitrogen	90 m	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.6 km	(1.6 mi)
1975	Nitric oxide and Nitrogen dioxide mixture Nitric oxide and Nitrogen								اينة				
1975	Nitrogen dioxide and Nitric oxide												
C/6L	Nitrogen tetroxide and Nitric oxide mixture												Ę
1994	Iron pentacarbonyl	) m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	185 m	(600 ft)	0.8 km	(0.5 mi)	3.2 km	(2.0 mi)
2004	Magnesium diamide	DANGE	DANGEROUS: \	When spilled in water, see list at the end of this table.	d in water,	see list at t	he end of	this table.					
2011	Magnesium phosphide	DANGE	EROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at t	he end of	this table.					
2012	Potassium phosphide	DANGE	EROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at t	he end of	this table.					
2013	Strontium phosphide	DANGE	EROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at t	he end of	this table.	B		13		×
2032	Nitric acid, fuming Nitric acid, red fuming	) m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)		1.8 km (1.1 mi)
2186	Hydrogen chloride, refrigerated liquid	) m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)
2188	Arsine	125 m (	(400 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)	335 m	(1100 ft)	2.1 km	(1.3 mi)	9.2 km	(5.7 mi)
2189	Dichlorosilane	) m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(900 ft)	0.6 km	(0.4 mi)	2.6 km	(1.6 mi)
2190	Oxygen difluoride Oxygen difluoride, compressed	215 m (	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
	STATE OF THE PERSON NAMED IN COLUMN SANDON								-			l	

Page 314

1	-	descriptions of the second sec						-						
441	2191	Sulfuryl fluoride Sulphuryl fluoride	30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	95 m	(300 ft)	0.3 km	(0.2 mi)	0.8 km	(0.5 mi)
N	2192	Germane	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.3 km	(1.4 mi)
2	2194	Selenium hexafluoride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.5 km	(2.8 mi)
2	2195	Tellurium hexafluoride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.1 km	(1.3 mi)
2	2196	Tungsten hexafluoride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)
N	2197	Hydrogen iodide, anhydrous	30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	125 m	(400 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)
20	2198	Phosphorus pentafluoride Phosphorus pentafluoride, compressed	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)
2	2199	Phosphine	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
N	2202	Hydrogen selenide, anhydrous	155 m	(500 ft)	1.3 km	(0.8 mi)	5.8 km	(3.6 mi)	490 m	(1600 ft)	4.7 km	(2.9 mi)	11.0+ km	(7.0+ mi)
201	2204	Carbonyl sulfide Carbonyl sulphide	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.3 km	(0.2 mi)	1.6 km	(1.0 mi)
20	2232	Chloroacetaldehyde 2-Chloroethanal	e0 m	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)
100	2308	Nitrosylsulfuric acid Nitrosylsulphuric acid	DANG	DANGEROUS: When spilled in water, see list at the end of this table.	When spilled	d in water,	see list at t	he end of	this table.			F		
N	2334	Allylamine	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)
2	2337	Phenyl mercaptan	95 m	(300 ft)	0.5 km	(0.3 mi)	1.6 km	(1.0 mi)	275 m	(a) (b) (t)	1.3 km	(0.8 mi)	6.0 km	6.0 km × (3.7 mi)
UNI	2382	1,2-Dimetrylhydrazine Dimetrylhydrazine, symmetrical	125 m	(400 ft)	0.6 km	(0.4 mi)	3.1 km	(1.9 mi)	365 m	(1200 ft)	2.6 km	(1.6 mi)	11.0+ km	(7.0+ mi)
N	2407	Isopropyl chloroformate	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)
20	2417	Carbonyl fluoride Carbonyl fluoride, compressed	m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	185 m	(600 ft)	0.8 km	(0.5 mi)	3.2 km	(2.0 mi)
NN	2418 2418	Sulfur tetrafluoride Sulphur tetrafluoride	95 m	(300 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)	275 m	(900 ft)	1.4 km	(0.9 mi)	6.8 km	(4.2 mi)

means distance can be larger in certain atmospheric conditions

	STATE OF THE PROPERTY OF THE P		100			1	1	2	200	いいこと	0		
Page		(From	a small pack	SMALL SPILLS	PILLS	SMALL SPILLS From a small package or small back from a large package	o.	ű)	a oracle mon	LARGE SPILLS	SPILLS	LARGE SPILLS	
		First ISOLATE in all Directions	st ATE ections	bers	Then PROTECT	Then PROTECT Persons Downwind during-	-	First ISOLATE in all Directions	st ATE ections	personal	Then PROTECT	Then PROTECT PROFILED PROFILED	
≘ ટું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	Y s (Miles)	NIGHT Kilometers (Miles)	4T (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	NIGHT Kilometers (Miles)	T (Miles)
2420	Hexafluoroacetone	m 09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)
2421	Nitrogen trioxide	ш 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.6 km	(1.0 mi)
2438	Trimethylacetyl chloride	90 m	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.9 km	(1.2 mi)
2442	Trichloroacetyl chloride	m.09	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)
2474	Thiophosgene	95 m	(300 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	4.2 km	(2.6 mi)
2477	Methyl isothiocyanate	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 ml)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)
2480	Methyl isocyanate	125 m	(400 ft)	0.5 km	(0.3 mi)	2.3 km	(1.4 mi)	305 m	(1000 ft)	1.9 km	(1.2 mi)	8.2 km	(5.1 mi)
2481	Ethyl isocyanate	185 m	(600 ft)	1.3 km	(0.8 mi)	6.1 km	(3.8 mi)	520 m	(1700 ft)	5.0 km	(3.1 mi)	11.0+ km	(7.0+ mi)
2482	n-Propyl isocyanate	155 m	(500 ft)	1.3 km	(0.8 mi)	5.8 km	(3.6 mi)	490 m	(1600 ft)	4.7 km	(2.9 mi)	11.0+ km	(7.0+ mi)
2483	Isopropyl isocyanate	155 m	(500 ft)	1.3 km	(0.8 mi)	5.8 km	(3.6 mi)	490 m	(1600 ft)	4.7 km	(2.9 mi)	11.0+ km	(7.0+ mi)
2484	tert-Butyl isocyanate	155 m	(500 ft)	1.1 km	(0.7 mi)	5.3 km	(3.3 mi)	460 m	(1500 ft)	4.3 km	(2.7 mi)	11.0+ km	(7.0+ mi)
2485	n-Butyl isocyanate	155 m	(500 ft)	1.1 km	(0.7 mi)	5.3 km	(3.3 mi)	460 m	(1500 ft)	4.3 km	(2.7 mi)	11.0+ km	(7.0+ mi)
2486	Isobutyl isocyanate	155 m	(500 ft)	1.1 km	(0.7 mi)	5.3 km	(3.3 mi)	460 m	(1500 ft)	4.3 km	(2.7 mi)	11.0+ km	(7.0+ mi)
2487	Phenyl isocyanate	155 m	(500 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)	460 m	(1500 ft)	4.0 km	(2.5 mi)	11.0+ km	(7.0+ mi)
2488	Cyclohexyl isocyanate	155 m	(500 ft)	1.0 km	(0.6 mi)	4.7 km	(2.9 mi)	460 m	(1500 ft)	3.9 km	(2.4 mi)	11.0+ km	(7.0+ mi)
2495	lodine pentafluoride	DAN	DANGEROUS:	When spille	d in water	When spilled in water, see list at the end of		this table.					
2521	Diketene, inhibited	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.3 km	(1.4 mi)
2534	Methylchlorosilane	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)
	Name and Address of the Owner, where							1	The same of	The same of	-		
	STATE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED												I

Page 316

		-										130	
2548	Chlorine pentafluoride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	3.9 km	(2.4 mi)
2600	Carbon monoxide and Hydrogen mixture Carbon monoxide and Hydrogen mixture, compressed Hydrogen and Carbon monoxide mixture, compressed mixture, compressed	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	85 E	(300 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)
2605	Methoxymethyl isocyanate	155 m	(500 ft)	1.3 km	(0.8 mi)	5.6 km	(3.5 mi)	490 m	(1600 ft)	4.7 km	(2.9 mi)	11.0+ km	(7.0+ mi)
2606	Methyl orthosilicate	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.6 km	1.6 km (1.0 mi)
2644	Methyl iodide	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	95 m	(300 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)
2646	Hexachlorocyclopentadiene	155 m	(500 ft)	1.0 km	(0.6 mi)	4.2 km	(2.6 mi)	430 m	(1400 ft)	3.4 km	(2.1 mi)	11.0+ km	(7.0+ mi)
2668	Chloroacetonitrile	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.3 km	(1.4 mi)
2676	Stibine	125 m	(400 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)	305 m	(1000 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 ml)
2683	Ammonium hydrosulfide,	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at t	he end of	his table.					
2683	Solution Ammonium hydrosulphide,						ij		H				
2683	Ammonium suffide, solution Ammonium sulphide, solution			à									
2692	Boron tribromide	60 m	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	2.9 km (1.8 mi)
2740	n-Propyl chloroformate	60 m	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.4 km	2.4 km (1.5 mi)
2742 2742	sec-Butyl chloroformate Isobutyl chloroformate	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.3 km	2.3 km (1.4 mi)
2743	n-Butyl chloroformate	60 m	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.3 km	(1.4 mi)
280e	Lithium nitride	DAN	DANGEROUS: When spilled in water, see list at the end of this table.	When spille	d in water,	see list at t	he end of	his table.	3,,				
317	100						ţn.						
	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN C							The state of the s		ı	١		

					- LANE	1		1					
Page		(From	SMALL SPILLS (From a small package or small leak from a large package)	SMALL SPILLS cage or small leak from	PILLS leak from a	large packad	(e)	(F	LARGE SPILLS (From a large package or from many small packages)	LARGE SPILLS ackage or from many s	SPILLS m many sm	all packages	
_		First ISOLATE in all Directions	st ATE ections	bers	Then PROTECT	Then PROTECT persons Downwind during-		First ISOLATE in all Directions	st ATE ections	bed	Then PROTECT Sons Downwing	Then PROTECT  persons Downwind during-	ė
⊇ છું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	(Miles)	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	IT (Miles)
2810	Poisonous liquid, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
2810	Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
2810	Poisonous liquid, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	1.9 km (1.2 mi) 8.8 km (5.5 mi)	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
2810	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
2810	Toxic liquid, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	1.9 km (1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
2810	Toxic liquid, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
2810	Toxic liquid, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, organic, n.o.s. (inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)

								1					
2810	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
2826	Ethyl chlorothioformate	95 m	(300 ft)	0.3 km	(0.2 mi)	1.1 km	(0.7 mi)	215 m	(700 ft)	1.0 km	(0.6 mi)	4.0 km	(2.5 mi)
2845	Ethyl phosphonous dichloride, anhydrous	95 m	(300 ft)	0.3 km	(0.2 mi)	1.6 km	(1.0 mi)	245 m	(800 ft)	1.3 km	(0.8 mi)	5.8 km	(3.6 mi)
2845	Methyl phosphonous dichloride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.4 km	(0.9 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	5.1 km	(3.2 mi)
2901	Bromine chloride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)
2927	Ethyl phosphonothioic dichloride, anhydrous	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	5.0 km	(3.1 mi)
2927	Ethyl phosphorodichloridate	95 m	(300 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)	275 m	(H 006)	1.4 km	(im 6.0)	6.3 km	(3.9 mi)
2927	Poisonous liquid, corrosive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	1.9 km (1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
2927	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
2927	Toxic liquid, corrosive, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	1.9 km (1.2 mj)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 ml) 11.0+ km	(7.0+ mi)
LZ62 Page 31:	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
		"+"	"I." means distance on the larger in contain atmoorphosis andicione	od acc	largar in	o window	l de	a conditi	Ī		I	ı	

		(Erom	SMALL SPILLS	SMALL SPILLS	PILLS			-		LARGE SPILLS	SPILLS		
2		First ISOLATE in all Directions	ATE ections	perse	Then PROTECT ons Downwing	Then PROTECT PROTECT PROTECT PROMOWING	-	First ISOLATE in all Directions	st ATE ections	person	Then Then PROTECT Sons Downwing	inst a large package of non many small packages.  Then Then PROTECT PROTECT Processing and during the packages.	
ુ ટું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	(Miles)	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	(Miles)
2929	Poisonous liquid, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
2929	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
2929	Poisonous liquid, flammable, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
2929	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	3.4 km (2.1 mi)	365 m	365 m (1200 ft)	2.7 km		(1.7 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
2929	Toxic liquid, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
2929	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)

	named and other Designation of the local division in which the local division in the local division						-	-					-	
The Part of the Pa	2929	Toxic liquid, flammable, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km (1.2 mj)	(1.2 mi)	8.8 km	8.8 km (5.5 m)	610 m	(2000 ft)	7.4 km	(4.6 mi)	7.4 km (4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
	2929	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	0.8 km (0.5 mi)	3,4 km	3.4 km (2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	2.7 km (1.7 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
THE THE	2977	Radioactive material, Uranium hexafluoride, fissile Uranium hexafluoride, fissile containing more than 1% Uranium-235	DAN	SEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at th	he end of	this table.					
THE MESSAGE	2978 2978 2978 2978	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted Uranium hexafluoride, fissile excepted Uranium hexafluoride, low specific activity Uranium hexafluoride, non-fissile	DAN	SEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at th	he end of	his table.	RE		33,133		
	3023 3023	2-Methyl-2-hepthanethiol tert-Octyl mercaptan	95 m	(300 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.7 km	3.7 km (2.3 mi)
	3048	Aluminum phosphide pesticide	DAN	SEROUS:	DANGEROUS: When spilled in water, see list at the end of this table.	d in water,	see list at the	he end of	his table.					7
50	3057	Trifluoroacetyl chloride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)
	3079	Methacrylonitrile, inhibited	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	(0.4 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.4 km	(1.5 mi)
Page	3083	Perchloryl fluoride	m 09	(200 ft)	0.2 km	(0.1 mi)	0.6 km	0.6 km (0.4 mi)	155 m	(500 ft)	0.5 km	(0.3 mi)	2.1 km	2.1 km (1.3 mi)
321				1										
										-				

				0 114410	0 1 110								١
		(From	SMALL SFILLS  From a small package or small leak from a large package)	sage or small leak from	leak from a	large packag	je)	(F	om a large p	ackage or from many s	m many sm	(From a large package or from many small packages)	
٥		First ISOLATE in all Directions	st ATE ections	bers	Then PROTECT	Then PROTECT persons Downwind during-		First ISOLATE in all Directions	ATE ections	ber	Then PROTECT Sons Downwing	Then PROTECT persons Downwind during-	ģ
⊇ ટું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	(Miles)	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	IT (Miles)
3122	Poisonous liquid, oxidizing, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3122	Toxic liquid, oxidizing, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
3123	Poisonous liquid, water- reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km		(4.6 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)
3123	Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	_	(1.7 mi) 11.0+ km	(7.0+ mi)

1 % K	3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 m)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
	3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
31 31	3123	Toxic liquid, water-reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 ті)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3	3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
	3123	Toxic liquid, which in contact with water emilis flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper.) Toxic liquid, which in contact with water emils flammable gases, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mj)	8.8 km	(5.5 ml)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
ਲ age 323	3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
			TOUR IT!	"A" manne dictance can be larger in	od nea	A . WI TO WAR	named in ab	manana	in sondition					

means distance can be larger in certain atmospheric conditions

	TABLE OF INITIAL ISOCATION AND PROTECTIVE ACTION DISTANCES	CILINII	1000		1000	J CC	3	200	000	ANCE	0		
		(From	SMALL SPILLS From a small backage or small leak from a large package.	SMALL SPILLS	PILLS leak from a	laroe packac	[0]	(Fr	on a lame m	LARGE SPILLS	SPILLS	LARGE SPILLS From a large package or from many small packages	
و		First ISOLATE in all Directions	st ATE ections	bers	Then PROTECT	Then PROTECT  persons Downwind during-		First ISOLATE in all Directions	ATE ections	Dec	Then PROTECT	Then PROTECT  PROTECT  Dersons Downwind during-	
⊇ <u>°</u>	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)		NIGHT Kilometers (Miles)	(Miles)	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	IT (Miles)
3276	Nitriles, poisonous, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Nitriles, toxic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m	(300 ft)	0.3 km	(0.2 mi)		1.3 km (0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 ml)
3278	Organophosphorus compound, poisonous, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Organophosphorus compound, toxic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m	(300 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)	275 m	(900 ft)	1.4 km	(0.9 mi)	6.3 km	(3.9 mi)
3279	Organophosphorus compound, poisonous, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Organophosphorus compound, toxic, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	E 26	(300 ft)	0.5 km	(0.3 mi)	1.8 km	(1.1 mi)	275 m	(900 ft)	1.4 km	(0.9 mi)	6.3 km	(3.9 mi)
3280	Organoarsenic compound, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m	(300 ft)	0.5 km	(0.3 mi)	1.6 km	(1.0 mi)	275 m	(900 ft)	1.4 km	(0.9 mi)	6.1 km	(3.8 mi)
3281	Metal carbonyls, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	125 ш	(400 ft)	0.5 km	(0.3 mi)	2.4 km	(1.5 mi)	305 m	(1000 ft)	1.9 km	(1.2 mi)	8.7 km	8.7 km (5.4 mi)

						-							
3287	Poisonous liquid, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3287	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
3287	Toxic liquid, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3287	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 ш	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km (7.0+ mi)	(7.0+ mi)
687 87 878 878 878 878 878 878 878 878 8	Toxic liquid, corrosive, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
					The second second								

				200		1	1			1			
Page		(From	a small pack	SMALL SPILLS (age or small leak fron	PILLS leak from a	SMALL SPILLS From a small package or small leak from a large package)	)e)	(F	om a laroe og	LARGE SPILLS	SPILLS	From a large package or from many small packages	
		First ISOLATE in all Directions	ATE octions	bers	Then PROTECT ons Downwind	Then PROTECT persons Downwind during-	-	First ISOLATE in all Directions	ATE ections	bed	Then PROTECT	Then PROTECT  PROTECT  Dersons Downwind during-	
⊇ ટું	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	NIGHT Kilometers (Miles)	4T (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	(Miles)
3289	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
3294	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	m 56	(300 ft)	0.3 km	(0.2 mi)	1.4 km (0.9 mi)	(0.9 mi)
3300	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide	m 09	(200 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)	125 m	(400 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)

THE REAL PROPERTY.	7.4 km (4.6 mi) 11.0+ km (7.0+ mi)	2.7 km (1.7 mi) 11.0+ km (7.0+ mi)	2.3 km (1.4 mi) 10.0 km (6.2 mi)	1.1 km (0.7 mi) 4.8 km (3.0 mi)	7.4 km (4.6 mi) 11.0+ km (7.0+ mi)	2.7 km (1.7 mi) 11.0+ km (7.0+ mi)	2.3 km (1.4 mi) 10.0 km (6.2 mi)	1.1 km (0.7 mi) 4.8 km (3.0 mi)	7.4 km (4.6 mi) 11.0+ km (7.0+ mi)
	610 m (2000 ft)	365 m (1200 ft)	335 m (1100 ft) 2.3	245 m (800 ft)	610 m (2000 ft)	365 m (1200 ft)	335 m (1100 ft)	245 m (800 ft)	610 m (2000 ft) 7.4
	8.8 km (5.5 mi)	3.4 km (2.1 mi)	2.7 km (1.7 mi)	1.3 km (0.8 mi)	8.8 km (5.5 mi)	3.4 km (2.1 mi)	2.7 km (1.7 mi)	1.3 km (0.8 mi)	8.8 km (5.5 mi)
	1.9 km (1.2 mi)	0.8 km (0.5 mi)	0.6 km (0.4 mi)	0.3 km (0.2 mi)	1.9 km (1.2 mi)	0.8 km (0.5 mi)	0.6 km (0.4 mi)	0.3 km (0.2 mi)	1.9 km (1.2 mi)
	215 m (700 ft)	125 m (400 ft)	125 m (400 ft)	95 m (300 ft)	215 m (700 ft)	125 m (400 ft)	125 m (400 ft)	95 m (300 ft)	215 m (700 ft)
A STATE OF THE PARTY OF THE PAR	Compressed gas, toxic, oxidizing, n.o.s. Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	Compressed gas, poisonous, cornosive, n.o.s. Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	Compressed gas, toxic, corrosive, n.o.s. Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)
ı	3303	3303	3303	3303	3304	3304	3304	3304	70 Page 32

	THE RESERVE TO SECOND STREET												
				SMALL SPILLS	PILLS					LARGE SPILLS	SPILLS		
		(From	a small pack	(From a small package or small leak from a large package)	leak from a	large packa	ge)	E	om a large p	ackage or fro	m many sm	(From a large package or from many small packages)	
		First ISOLATE in all Directions	ATE ections	perso	Then PROTECT Ons Downwing	Then PROTECT Dersons Downwind during-	ė	First ISOLATE in all Directions	St ATE ections	ped	Then PROTECT Sons Downwin	Then PROTECT Downwind during-	Ċ
S S	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	IT (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	γ (Miles)	NIGHT Kilometers (Miles)	IT (Miles)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km (0.2 mi)	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km (1.2 mi)	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	7.4 km (4.6 mi) 11.0+ km	(7.0+ mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km (0.5 mi)	(0.5 mi)	3.4 km	3.4 km (2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	2.7 km (1.7 mi) 11.0+ km	(7.0+ mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km (0.4 mi)	(0.4 mi)	2.7 km	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km	2.3 km (1.4 mi)	10.0 km	(6.2 mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mj)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)

	The second secon			I	I								
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	(1.7 mi) 11.0+ km	(7.0+ mi)
3305	5 Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3305	5 Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
90g Page 331	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 ті)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)

		(Fron	SMALL SPILLS From a small package or small leak from a large package)	SMALL SPILLS (age or small leak from	PILLS leak from a	large packag	Je)	Ē.	om a large p	LARGE SPILLS	PILLS	LARGE SPILLS From a large package or from many small packages)	
2	The state of the s	Fig ISOL in all Dir	First ISOLATE in all Directions	bers	Then PROTECT ons Downwing	Then PROTECT persons Downwind during-	-	First ISOLATE in all Directions	st ATE ections	ned	Then PROTECT Sons Downwin	Then PROTECT persons Downwind during-	-
<u>.</u>	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	v (Miles)	NIGHT Kilometers (Miles)	H (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	(Miles)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km		(1.7 mi) 11.0+ km	(7.0+ mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)		2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	0.3 km (0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	4.8 km (3.0 mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s. Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 ml)	2,7 km (1.7 mi) 11.0+ km (7.0+ mi)	(7.0+ mi)

10.0 km (6.2 mi)	4.8 km (3.0 mi)	11.0+ km (7.0+ mi)	1.0+ km (7.0+ mi)	10.0 km (6.2 mi)	4.8 km (3.0 mi)	1.0+ km (7.0+ mi)	(1.7 mi) 11.0+ km (7.0+ mi)	10.0 km (6.2 mi)
(1.4 mi) 1	(0.7 mi)	(4.6 mi) 11	(1.7 mi) 11.0+ km	(1.4 mi) 1	(0.7 mi)	(4.6 mi) 11.0+ km	(1.7 mi) 11	(1.4 mi)
2.3 km	1.1 km	7.4 km	2.7 km	2.3 km	1.1 km	7.4 km	2.7 km	2.3 km
(1100 ft)	(800 ft)	(2000 ft)	(1200 ft)	(1100 ft)	(800 ft)	(2000 ft)	(1200 ft)	(1100 ft)
335 m	245 m	610 m	365 m	335 m	245 m	610 m	365 m	335 m
(1.7 mi)	(0.8 mi)	(5.5 mi)	(2.1 mi)	(1.7 mi)	(0.8 mi)	(5.5 mi)	(2.1 ml)	(1.7 mi)
2.7 km	1.3 km	8.8 km	3.4 km	2.7 km	1.3 km	8.8 km	3.4 km	2.7 km
(0.4 mi)	(0.2 mi)	(1.2 mi)	(0.5 mi)	(0.4 mi)	(0.2 mi)	(1.2 mi)	(0.5 mi)	(0.4 mi)
0.6 km	0.3 km	1.9 km	0.8 km	0.6 km	0.3 km	1.9 km	0.8 km	0.6 km
(400 ft)	(300 ft)	(700 ft)	(400 ft)	(400 ft)	(300 ft)	(700 ft)	(400 ft)	(400 ft)
125 m	95 m	215 m	125 m	125 m	95 m	215 m	125 m	125 m
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	Liquefied gas, poisonous, corrosive, n.o.s. Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	Liquefied gas, toxic, corrosive, n.o.s. Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)
3307	3307	3308	3308	3308	3308	3308	3308	e Page 3:

means distance can be larger in certain atmospheric conditions

					0								
		(From	a small pack	SMALL SPILLS  From a small package or small leak from a large package)	leak from a	large packar	Je)	(F.	om a large p	(From a large backage or from many small packages)	SPILLS m many sm	all packages	
2		First ISOLATE in all Directions	First ISOLATE all Directions	persi	Then PROTECT ons Downwind	Then PROTECT persons Downwind during-	Ċ	First ISOLATE in all Directions	ATE ections	ued	Then PROTECT Sons Downwing	Then PROTECT  persons Downwind during-	ė
S S	NAME OF MATERIAL	Meters	(Feet)	DAY Kilometers (Miles)	(Miles)	NIGHT Kilometers (Miles)	H (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	Y (Miles)	NIGHT Kilometers (Miles)	4T s (Miles)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3309	Liquefied gas, toxic, flammable, cornosive, n.o.s. Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	(4.6 mi) 11.0+ km	(7.0+ mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
												and the second	

Page 334

		I								I	I	The second second	
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3310	Liquefied gas, toxic, oxidizing, cornosive, n.o.s. Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3310	Liquefied gas, toxic, oxidizing, comosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3310 Page	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3318 e 335	Ammonia solution, with more than 50% Ammonia	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	m 09	(200 ft)	0.2 km	(0.1 mi)	0.3 km	(0.2 mi)
	MAN CONTRACTOR OF THE PARTY OF	0.0											

means distance can be larger in certain atmospheric conditions

First   Firs			National Property of the Party											
In all Directions   In a			(From	a small nack	SMALL S	PILLS	larna nacka	100	(0.00	o mo	LARGE	SPILLS		
NAME OF MATERIAL         Meters (Feet)         Kilometers (Miles)         Kilometers (Mi	و		ISOL in all Din	st ATE ections	person	The PROT ons Down	ECT wind during	- L	ISOL/	St ATE	package of it	Th PRO	nail packages len TECT	
Chlorine dioxide, hydrate, frozen         DANGEROUS, When spilled in water, see list at the end of this table.         185 m         (600 ft)         0.6 km         (0.4 mi)         2.7 km           Fluorine, refrigerated riquid (cryogenic fiquid)         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.6 km         (0.4 mi)         2.7 km           Carbon monoxide, refrigerated figuid)         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         9.5 m         (300 ft)         0.3 km         (0.2 mi)         1.4 km         (0.9 mi)         245 m         (800 ft)         1.3 km         (0.8 mi)         3.5 km           Chlocropivaloy chloride         80 m         (300 ft)         0.3 km         (0.2 mi)         1.3 km         (0.8 mi)         245 m         (800 ft)         1.0 km         (0.5 mi)         4.5 km           Trimethoxysilane         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         1.85 m         (600 ft)         0.6 km         (0.4 mi)         2.9 km	⊇ ġ	NAME OF MATERIAL	Meters		DA Kilometers	Y (Miles)	NIGH Kilometers	HT (Miles)	Meters	(Feet)	DA Kilometers	Y (Miles)	NIG Kilometer	HT (Miles)
Fluorine, refrigerated liquid         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.6 km         0.1 mi)         2.7 km           Carbon enchoxide, refrigerated liquid)         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (3.00 ft)         0.2 km         (0.1 mi)         0.6 km           Methyl phosphonic dichloride         95 m         (300 ft)         0.3 km         (0.2 mi)         1.4 km         (0.6 mi)         245 m         (800 ft)         1.3 km         (0.8 mi)         5.5 km           Chloropivaloy chloride         60 m         (200 ft)         0.3 km         (0.2 mi)         1.4 km         (0.6 mi)         245 m         (800 ft)         1.3 km         (0.8 mi)         3.5 km           3.5.Dichloro-2,4.6-         95 m         (300 ft)         0.3 km         (0.2 mi)         13 km         (0.8 mi)         245 m         (800 ft)         1.0 km         0.5 km           Trimethoxysiane         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.4 mi)         2.9 km	9191	Chlorine dioxide, hydrate, frozen	DAN	GEROUS:	When spille	d in water,	see list at the	he end of ti	his table.			1		,
Carbon monoxide, refrigerated         30 m         (100 ft)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         0.2 km         (0.1 mi)         0.6 km	9192	Fluorine, refrigerated liquid (cryogenic liquid)	m 09	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(e00 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)
Methyl phosphonic dichloride         95 m         (300 ft)         0.3 km         (0.2 mi)         1.4 km         (0.9 mi)         245 m         (700 ft)         0.3 km         0.5 km         5.5 km           Chloropivalory chloride         60 m         (200 ft)         0.3 km         (0.2 mi)         1.0 km         (0.6 mi)         245 m         (700 ft)         0.8 km         (0.5 mi)         3.5 km           3.5-Dichoropyridine         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.6 km         (0.4 mi)         2.9 km           Trimethoxysilane         60 m         (200 ft)         0.2 km         (0.1 mi)         0.8 km         (0.5 mi)         185 m         (600 ft)         0.6 km         (0.4 mi)         2.9 km	9202	Carbon monoxide, refrigerated liquid (cryogenic liquid)	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	95 m	(300 ft)	0.2 km	(0.1 mi)	0.6 km	_
Chloropivaloyi chloride 60 m (200 ft) 0.3 km (0.2 mi) 1.0 km (0.6 mi) 215 m (700 ft) 0.8 km (0.5 mi) 3.5 km (3.5 Dichloro-2.4.6- 95 m (300 ft) 0.3 km (0.2 mi) 1.3 km (0.8 mi) 245 m (800 ft) 1.0 km (0.6 mi) 4.5 km Trimethoxysilane 60 m (200 ft) 0.2 km (0.1 mi) 0.8 km (0.5 mj) 185 m (600 ft) 0.6 km (0.4 mi) 2.9 km	9206	Methyl phosphonic dichloride	95 m	(300 ft)	0.3 km	(0.2 mi)	1.4 km	(im 6:0)	245 m	(800 ft)	1.3 km	(0.8 mi)	5.5 km	_
3.5-Dichloro-2.4.6-  Trimethoxysilane  60 m (200 ft) 0.3 km (0.1 mi) 0.8 km (0.5 mi) 185 m (600 ft) 0.6 km (0.4 mi) 2.9 km	9263	Chloropivaloyl chloride	60 m	(200 ft)	0.3 km	(0.2 mi)	1.0 km	(0.6 mi)	215 m	(700 ft)	0.8 km	(0.5 mi)	3.5 km	_
Trimethoxysilane 60 m (200 ft) 0.2 km (0.1 mi) 0.8 km (0.5 ml) 185 m (600 ft) 0.6 km (0.4 mi) 0.8 km (0.5 ml) 185 m (600 ft) 0.6 km (0.4 mi)	9264	3,5-Dichloro-2,4,6- trifluoropyridine	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.0 km	(0.6 mi)	4.5 km	
	9569	Trimethoxysilane	E 99	(200 ft)	0.2 km		0.8 km	(0.5 m)	m 285 m	((600 ft)	0.6 km			(1.8 mj)

"+" means distance can be larger in certain atmospheric conditions

### LIST OF DANGEROUS WATER-REACTIVE MATERIALS

Materials Which Create Large Amounts of Toxic (PIH) Vapor When Spilled in Water

\* Dangerous From 0.5 to 10km (0.3 - 6.0 miles) downwind \*

* Dangerous From 0.5 to 10km (0.3 - 6.0 miles) downwind											
ID	Guide					Toxic Vapor (PIH)					
No.	No.	Name of Mater	ial			Pi	oduced				
1242	139	Methyldichlorosilane					HCI				
1250	155	Methyltrichlorosilane					HCI				
1295	139	Trichlorosilane					HCI				
1360	139	Calcium phosphide					PH <sub>3</sub>				
1397	139	Aluminum phosphide					PH <sub>3</sub>				
1412	139	Lithium amide					NH <sub>3</sub>				
1419	139	Magnesium aluminum	phosph	hide			PH <sub>3</sub>				
1432	139	Sodium phosphide					PH <sub>3</sub>				
1433	139	Stannic phosphides					PH <sub>3</sub>				
1471	140	Lithium hypochlorite, o	dry			CI <sub>2</sub>	HCI				
1471	140	Lithium hypochlorite m	ixture			Cl2	HCI				
1471	140	Lithium hypochlorite m	ixtures	s, dry		Cl2	HCI				
1680	157	Potassium cyanide					HCN				
1689	157	Sodium cyanide					HCN				
1714	139	Zinc phosphide					PH <sub>3</sub>				
1716	156	Acetyl bromide					HBr				
1717	132	Acetyl chloride					HCI				
1725	137	Aluminum bromide, an	hydrou	ıs			HBr				
1726	137	Aluminum chloride, an	hydrou	ıs			HCI				
1732	157	Antimony pentafluorid	е				HF				
1748	140	Calcium hypochlorite,	dry			Cl2	HCI				
1748	140	Calcium hypochlorite i 39% available Chlor		e, dry, with more than 8% available Oxygen)		CI <sub>2</sub>	HCI				
1758	137	Chromium oxychloride					HCI				
1777	137	Fluorosulfonic acid					HF				
1777	137	Fluorosulphonic acid					HF				
	B.U. =	والمساولين									
	PIH For		uc	11-1							
Br, Bromine Cl, Chlorine HBr Hydrogen bromide HCl Hydrogen chloride HCN Hydrogen cyanide			HF HI H <sub>2</sub> S H <sub>2</sub> S	Hydrogen fluoride Hydrogen iodide Hydrogen sulfide Hydrogen sulphide	NO <sub>2</sub> PH <sub>3</sub> SO <sub>2</sub> SO <sub>2</sub>	Nitrogen dioxide Phosphine Sulfur dioxide Sulphur dioxide					

Ammonia

338

Hydrogen cyanide

### LIST OF DANGEROUS WATER-REACTIVE MATERIALS

Materials Which Create Large Amounts of Toxic (PIH) Vapor When Spilled in Water

\* Dangerous From 0.5 to 10km (0.3 - 6.0 miles) downwind \*

ID	Guide	TOXIC VAPOI (PI				
No.	No.	Name of Material	Produced			
1806	137	Phosphorus pentachloride			HCI	
1818	156	Silicon tetrachloride			HCI	
1836	137	Thionyl chloride		HCI	SO <sub>2</sub>	
1898	156	Acetyl iodide			HI	
2004	135	Magnesium diamide			NH <sub>3</sub>	
2011	139	Magnesium phosphide			PH <sub>3</sub>	
2012	139	Potassium phosphide			PH <sub>3</sub>	
2013	139	Strontium phosphide			PH <sub>3</sub>	
2308	157	Nitrosylsulfuric acid			NO <sub>2</sub>	
2308	157	Nitrosylsulphuric acid			NO <sub>2</sub>	
2495	144	Iodine pentafluoride			HE	
2683	132	Ammonium hydrosulfide, solution		NH <sub>3</sub>	H <sub>2</sub> S	
2683	132	Ammonium hydrosulphide, solution		NH <sub>3</sub>	H <sub>2</sub> S	
2683	132	Ammonium sulfide, solution		NH <sub>3</sub>	H <sub>2</sub> S	
2683	132	Ammonium sulphide, solution		NH <sub>3</sub>	H <sub>2</sub> S	
2806	138	Lithium nitride			NH <sub>3</sub>	
2977	166	Radioactive material, Uranium hexafluoride, fissile			HF	
2977	166	Uranium hexafluoride, fissile containing more than 1% Uranium-235			HF	
2978	166	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted			HF	
2978	166	Uranium hexafluoride, fissile excepted			HF	
2978	166	Uranium hexafluoride, low specific activity			HF	
2978	166	Uranium hexafluoride, non-fissile			HF	
3048	157	Aluminum phosphide pesticide			PH <sub>3</sub>	
9191	143	Chlorine dioxide, hydrate, frozen			CI <sub>2</sub>	
			4			
	PIH For		NO	Nitrogen	diovide	
Br <sub>2</sub> Cl <sub>2</sub> HBr HCl HCN	Hydr	rine HI Hydrogen iodide ogen bromide H <sub>s</sub> S Hydrogen sulfide	PH; SO,	Nitrogen Phosphir Sulfur did Sulphur d	ne oxide	

### **PROTECTIVE ACTIONS**

Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public during an incident involving releases of dangerous goods. The Table of Initial Isolation and Protective Action Distances (green-bordered pages) predicts the size of downwind areas which could be affected by a cloud of dangerous gas. People in this area should be evacuated and/or protected in-place inside buildings.

Isolate Hazard Area and Deny Entry means keep everybody away from the area if they are not directly involved in emergency response operations. Unprotected emergency responders should not be allowed to enter the isolation zone. This "isolation" task is done first to establish control over the area of operations. This is the first step for any protective actions that may follow. See the Table of Isolation and Protective Action Distances (green-bordered pages) for more detailed information on specific materials.

**Evacuate** means move all people from a threatened area to a safer place. To perform evacuation, there must be enough time for people to be warned, to get ready, and to leave an area. If there is enough time, evacuation is the best protective action. Begin evacuating people nearby and those outdoors in direct view of the scene. When additional help arrives, expand the area to be evacuated downwind and crosswind to at least the extent recommended in this guidebook. Even after people move to the distances recommended, they may not be completely safe from harm. They should not be permitted to congregate at such distances. Send evacuees to a definite place, by a specific route, far enough away so they will not have to be moved again if the wind shifts.

In-Place Protection means people inside a building should remain inside until the danger passes. In the case of short-term spills and toxic vapor clouds, the material may be deflected by a multistory building and pass by without affecting the occupants of the building. In-place protection is used when evacuating the public would cause greater risk than staying where they are, or when an evacuation cannot be performed. Direct the people inside to close all doors and windows and to shut off all ventilating, heating and cooling systems. In-place protection may not be the best option if (a) the vapors are flammable; (b) if it will take a long time for the gas to clear the area; or (c) if buildings cannot be closed tightly. Vehicles can offer some protection for a short period if the windows are closed and the ventilating systems are shut off. Vehicles are not as effective as buildings for in-place protection.

It is vital to maintain communications with competent persons inside the building so that they are advised about changing conditions. Persons protected-in-place should be warned to stay far from windows because of the danger from glass and projected metal fragments in a fire and/or explosion.

Every dangerous goods incident is different. Each will have special problems and concerns. Action to protect the public must be selected carefully. These pages can help with initial decisions on how to protect the public. Officials must continue to gather information and monitor the situation until the threat is removed.

### BACKGROUND INFORMATION ON THE INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCE TABLE

Initial isolation and protective action distances for this guidebook were determined for small and large spills occurring day or night. Analysis used state-of-the-art source term and vapor cloud dispersion modeling, probabilistic application of the U.S. DOT's Hazardous Materials Incident Reporting System (HMIRS) incident data base, actual atmospheric data and the latest toxicological exposure guidelines available for each material. The complete report may be obtained from the U.S. Department of Transportation.

**Source term modeling** considered four factors: (1) the DOT HMIRS data base, (2) package sizes authorized to transport dangerous goods, (3) spill rates from damaged packages, and (4) release of vapors by evaporation from a liquid pool, direct release of gaseous vapors from a package into the atmosphere, or a combination of both. Liquid pool evaporation rates were calculated assuming a warm, sunny day, 35°C (95°F). A leaking package of 208 liters (55 U.S. gallons) or less (such as a drum, jerrican, or box with inner containers) is considered a small spill. Larger packages leaking less than 208 liters (55 U.S. gallons) and compressed gas leaking from a small cylinder are also considered small spills. A large spill involves many small leaking packages or a leaking package greater than 208 liters (55 U.S. gallons) (such as a cargo tank, portable tank, or one-ton compressed gas cylinder).

Dispersion models calculated downwind vapor concentrations based on actual, 24-hour, groundlevel and upper-air meteorological data from 61 cities (including Alaska and Hawaii) over a recent 5-year period. The models approximated atmospheric conditions at over 40,000 hypothetical U.S. incident sites derived from fatal accident locations involving trucks in the same 5-year period. A sensitivity study indicated heavy gas effects on vapor plume dispersion were minimal for the incident release sizes considered in this guidebook when compared to uncertainty in other input parameters. Data also showed that nighttime atmospheric conditions generally transported vapor plumes much greater distances than day-time conditions. Therefore, daytime and nighttime protective action guidance is provided. For this Table, a "Day" incident should be considered as occurring anytime after sunrise and before sunset, while "Night" includes all hours between sunset and sunrise.

**Toxicological short-term exposure guidelines** for the materials were applied to vapor concentrations to determine how far downwind the public is in danger. An independent panel of toxicological experts from industry and academia recommended that toxicological exposure guidelines be chosen from emergency response guidelines, occupational health guidelines, and lethal concentrations determined from animal studies. Specific means of application of these health criteria and adjustments based on time-of-exposure were made when recommended by the panel of experts.

Following this analysis, the resulting protective action distances were ordered from the 100th to the 0th percentile (largest protective action distance to the smallest) for both day-time and nighttime scenarios. The distances appearing in the Table provide guidance describing the **90th percentile incident**. This means that for a specific material analyzed at the incident locations mentioned above, 90 percent required protective actions less than the Table indicates, while 10 percent required larger distances.

The Protective Action Zone assumes that random changes in wind direction confine the vapor plume to an area within 30 degrees on either side of the predominant wind direction, resulting in a crosswind protective action distance equal to the downwind protective action distance. Within the protective action zone a level of vapor concentration may exist resulting in nearly all unprotected persons becoming incapacitated and unable to take protective action and/or incurring serious or irreversible health effects. The Initial Isolation Zone is defined as an area, including upwind from the incident, within which dangerous concentrations of a material may exist.

### Materials which produce toxic vapors when spilled in water

Materials listed at the end of the Table produce a significant toxic gas or vapor hazard when spilled in water. Only materials which produce sufficient toxic vapor to endanger the public beyond 0.5 km (1/3 mile) downwind of the spill are included. This was determined by analysis of the following factors: (1) rate of hydrolysis, (2) average values for water temperatures, (3) extent to which toxic product dissolves in water, (4) the amount of heat released by the reaction, and (5) the heat of reaction effect on (1) through (3) above. Other materials which react with water to produce toxic vapor but which do not pose a hazard greater than 0.5 km (1/3 mile) downwind are not included on this list. PIH materials which also react with water to produce more or different toxic gas were not included on the list if the hazard from the PIH material itself is greater than the hazard of the vapor produced by the PIH material in water.

### **PROTECTIVE CLOTHING**

**Street Clothing and Work Uniforms.** These garments, such as uniforms worn by police and emergency medical services personnel, provide almost no protection from the harmful effects of dangerous goods.

Structural Fire Fighters' Protective Clothing (SFPC). This category of clothing, often called turnout or bunker gear, means the protective clothing normally worn by fire fighters during structural fire fighting operations. It includes a helmet, coat, pants, boots, gloves and a hood to cover parts of the head not protected by the helmet and facepiece. This clothing must be used with full-facepiece positive pressure self-contained breathing apparatus (SCBA). This protective clothing should, at a minimum, meet the U.S. Department of Labor's Occupational Safety and Health Administration's (OSHA) Fire Brigades Standard (29 CFR 1910.156). Structural fire fighters' protective clothing provides limited protection from heat, but may not provide adequate protection from the harmful vapors or liquids that are encountered during dangerous goods incidents. Each guide includes a statement about the use of SFPC in incidents involving those materials referenced by that guide. Some guides state that SFPC provides limited protection. In those cases, the responder wearing SFPC and SCBA may be able to perform an expedient, that is quick "in-and-out", operation. However, this type of operation can place the responder at risk of exposure, injury or death. The incident commander makes the decision to perform this operation only if an overriding benefit can be gained (i.e., perform an immediate rescue, turn off a valve to control a leak. etc.). The coverall-type protective clothing customarily worn to fight fires in forests or wildlands is **not** SFPC and is not recommended nor referred to elsewhere in this guidebook.

Positive Pressure Self-Contained Breathing Apparatus (SCBA). This apparatus provides a constant, positive pressure flow of air within the facepiece, even if one inhales deeply while doing heavy work. Use apparatus certified by NIOSH and the Mine Safety and Health Administration in accordance with 30 CFR Part 11. Use it in accordance with the requirements for respiratory protection specified in the OSHA Hazardous Waste Site Operations and Emergency Response Standards (29 CFR 1910.120) and/or the Fire Brigade Standard (29 CFR 1910.156). Chemical-cartridge respirators or other filtering masks are not acceptable substitutes for positive pressure self-contained breathing apparatus. Demand-type SCBA does not meet the OSHA Fire Brigade Standard.

Chemical Protective Clothing and Equipment. Safe use of this type of protective clothing and equipment requires specific skills developed through training and experience. It is generally not available to, or used by, first responders. This type of special clothing may protect against one chemical, yet be readily permeated by chemicals for which it was not designed. Therefore, protective clothing should not be used unless it is compatible with the released material. This type of special clothing offers little or no protection against heat. Examples of this type of equipment have been described as (1) Vapor Protective Suits, also known as Totally-Encapsulating Chemical Protective (TECP) Suits or Level A\* protection, and (2) Liquid-Splash Protective Suits, also known as Level B\* protection. No single protective clothing material will protect you from all dangerous goods. Do not assume any protective clothing is resistant to heat or flame exposure unless it is so certified by the manufacturer.

<sup>\*</sup> Consult glossary for additional protection levels under the heading "Protective Clothing".

### FIRE AND SPILL CONTROL

### FIRE CONTROL

Water is the most common and generally most available fire extinguishing agent. Exercise caution in selecting a fire extinguishing method since there are many factors to be considered in an incident. Water may be ineffective in fighting fires involving some materials; its effectiveness depends greatly on the method of application.

Spill fires involving flammable liquids are generally controlled by applying a fire fighting foam to the surface of the burning material. Fighting flammable liquid fires requires foam concentrate which is chemically compatible with the burning material, correct mixing of the foam concentrate with water and air, and careful application and maintenance of the foam blanket. There are two general types of fire fighting foam: regular and alcohol-resistant. Examples of regular foam are protein-base, fluoroprotein, and aqueous film forming foam (AFFF). Some flammable liquids, including many petroleum products, can be controlled by applying regular foam. Other flammable liquids, including polar solvents (flammable liquids which are water soluble) such as alcohols and ketones, have different chemical properties. A fire involving these materials cannot be easily controlled with regular foam and requires application of alcohol-resistant foam. Polar-solvent fires may be difficult to control and require a higher foam application rate than other flammable liquid fires (see NFPA/ ANSI Standards 11 and 11A for further information). Refer to the appropriate guide to determine which type of foam is recommended. Although it is impossible to make specific recommendations for flammable liquids which have subsidiary corrosive or toxic hazards. alcohol-resistant foam may be effective for many of these materials. The emergency response telephone number on the shipping document, or the appropriate emergency response agency, should be contacted as soon as possible for guidance on the proper fire extinguishing agent to use. The final selection of the agent and method depends on many factors such as incident location, exposure hazards, size of the fire, environmental concerns, as well as the availability of extinguishing agents and equipment at the scene.

### WATER REACTIVE MATERIALS

Water is sometimes used to flush spills and to reduce or direct vapors in spill situations. Some of the materials covered by the guidebook can react violently or even explosively with water. In these cases, consider letting the fire burn or leaving the spill alone (except to prevent its spreading by diking) until additional technical advice can be obtained. The applicable guides clearly warn you of these potentially dangerous reactions. These materials require technical advice since

 water getting inside a ruptured or leaking container may cause an explosion;

(2) water may be needed to cool adjoining containers to prevent their rupturing (exploding) or further spread of the fires:

- (3) water may be effective in mitigating an incident involving a water-reactive material only if it can be applied at a sufficient flooding rate for an extended period; and
- (4) the products from the reaction with water may be more toxic, corrosive, or otherwise more undesirable than the product of the fire without water applied.

When products from water-reaction are toxic (PIH) and produced in large amounts, consult the list on the last page of the Protective Action Table for more detailed information than found in the guide for that material.

When responding to an incident involving water-reactive materials, take into account the existing conditions such as wind, precipitation, location and accessibility to the incident, as well as the availability of the agents to control the fire or spill. Because there are variables to consider, the decision to use water on fires or spills involving water-reactive materials should be based on information from an authoritative source; for example, a producer of the material, who can be contacted through the emergency response telephone number or the appropriate emergency response agency.

### **VAPOR CONTROL**

Limiting the amount of vapor released from a pool of flammable or corrosive liquids is an operational concern. It requires the use of proper protective clothing, specialized equipment, appropriate chemical agents, and skilled personnel. Before engaging in vapor control, get advice from an authoritative source as to the proper tactics.

There are several ways to minimize the amount of vapors escaping from pools of spilled liquids, such as special foams, adsorbing agents, absorbing agents, and neutralizing agents. To be effective, these vapor control methods must be selected for the specific material involved and performed in a manner that will mitigate, not worsen, the incident.

Where specific materials are known, such as at manufacturing or storage facilities, it is desirable for the dangerous goods response team to prearrange with the facility operators to select and stockpile these control agents in advance of a spill. In the field, first responders may not have the most effective vapor control agent for the material available. They are likely to have only water and only one type of fire fighting foam on their vehicles. If the available foam is inappropriate for use, they are likely to use water spray. Because the water is being used to form a vapor seal, care must be taken not to churn or further spread the spill during application. Vapors that do not react with water may be directed away from the site using the air currents surrounding the water spray. Before using water spray or other methods to safely control vapor emission or to suppress ignition, obtain technical advice, based on specific chemical name identification.

Alcohol resistant foam

A foam that is resistant to "polar" chemicals such as ketones and esters which may break down other types of foam.

Burn

Refers to either a chemical or thermal burn, the former may be caused by corrosive substances and the latter by liquefied cryogenic gases, hot molten substances, or flames.

CO,

Carbon dioxide gas.

Cold zone

Area where the command post and support functions that are necessary to control the incident are located. This is also referred to as the clean zone or support zone in other documents. (NFPA 472)

Combustible liquid

Liquids which have a flash point greater than  $60.5^{\circ}$ C ( $141^{\circ}$ F) and below  $93^{\circ}$ C ( $200^{\circ}$ F). U.S. regulations permit a flammable liquid flashing between  $38^{\circ}$ C ( $100^{\circ}$ F) and  $60.5^{\circ}$ C ( $141^{\circ}$ F) to be reclassed as a combustible liquid.

Compatibility group

Letters identify explosives that are deemed to be compatible. Class 1 materials are considered to be "compatible" if they can be transported together without significantly increasing either the probability of an incident or, for a given quantity, the magnitude of the effects of such an incident.

- A Substances which are expected to mass detonate very soon after fire reaches them.
- B Articles which are expected to mass detonate very soon after fire reaches them.
- C Substances or articles which may be readily ignited and burn violently without necessarily exploding.
- D Substances or articles which may mass detonate (with blast and/or fragment hazard) when exposed to fire.
- E, F Articles which may mass detonate in a fire.
- G Substances and articles which may mass explode and give off smoke or toxic gases.
- H Articles which in a fire may eject hazardous projectiles and dense white smoke.

- J Articles which may mass explode.
- K Articles which in a fire may eject hazardous projectiles and toxic gases.
- L Substances and articles which present a special risk and could be activated by exposure to air or water.
- N Articles which contain only extremely insensitive detonating substances and demonstrate a negligible probability of accidental ignition or propagation.
- S Packaged substances or articles which, if accidentally initiated, produce effects that are usually confined to the immediate vicinity.

### Control zones

Designated areas at dangerous goods incidents, based on safety and the degree of hazard. Many terms are used to describe control zones; however, in this guidebook, these zones are defined as the hot, warm, and cold zones. (NFPA 472)

### Cryogenic liquid

A refrigerated, liquefied gas that has a boiling point colder than -90°C (-130°F)] at atmospheric pressure.

### **Decomposition products**

Products of a chemical or thermal break-down of a substance.

### Decontamination

The removal of dangerous goods from personnel and equipment to the extent necessary to prevent potential adverse health effects. Always avoid direct or indirect contact with dangerous goods; however, if contact occurs, personnel should be decontaminated as soon as possible. Since the methods used to decontaminate personnel and equipment differ from one chemical to another, contact the chemical manufacturer, through CANUTEC, CHEMTREC®, CHEMTEL, SETIQ or CECOM to determine the appropriate procedure. Contaminated clothing and equipment should be removed after use and stored in a controlled area (hot zone) until cleanup procedures can be initiated. In some cases, protective clothing and equipment cannot be decontaminated and must be disposed of in a proper manner.

### Dry chemical

A preparation designed for fighting fires involving flammable liquids, pyrophoric substances and electrical equipment. Common types contain sodium bicarbonate or potassium bicarbonate.

Page 347

Edema The accumulation of an excessive amount of watery fluid in

cells and tissues. Pulmonary edema is an excessive buildup of water in the lungs, for instance, after inhalation of a gas that

is corrosive to lung tissue.

Flammable liquid A liquid that has a flash point of 60.5°C (141°F) or lower.

Flash point Lowest temperature at which a liquid or solid gives off vapor in

such a concentration that, when the vapor combines with air near the surface of the liquid or solid, a flammable mixture is formed. Hence, the lower the flash point, the more flammable

the product.

Hot zone Area immediately surrounding a dangerous goods incident

which extends far enough to prevent adverse effects from released dangerous goods to personnel outside the zone. This zone is also referred to as exclusion zone or restricted

zone in other documents. (NFPA 472)

Immiscible In this guidebook, means that material does not mix readily

with water.

Incident Command An organized approach to control and manage operations at System (ICS) An emergency incident. The OSHA Hazardous Waste

an emergency incident. The OSHA Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120(q)(3)(ii)) require that an ICS be implemented by the

senior emergency response official on the scene. See Appendix C, Section 6, of the OSHA rule for more information

on ICS.

Ignition source Includes heat, sparks, flames, static electricity and friction.

Ignition sources should always be eliminated.

Marine pollutant Substances, articles or materials which, if released into the

aquatic environment, may cause serious environmental

damage.

Mass explosion Explosion which affects almost the entire load virtually

instantaneously.

Miscible In this guidebook, means material that mixes readily with

water.

Non-polar See "Immiscible".

Oxidizer A chemical which supplies its own oxygen and which helps other combustible material burn more readily.

The letter "P" following a guide number in the yellow-bordered

and blue-bordered pages identifies a material which may polymerize violently under high temperature conditions or contamination with other products. This polymerization will produce heat and high pressure buildup in containers which

may explode or rupture.

pH pH is a value that represents the acidity or alkalinity of a water solution. Pure water has a pH of 7. A pH value below 7

indicates an acid solution (a pH of 1 is extremely acidic). A pH above 7 indicates an alkaline solution (a pH of 14 is extremely alkaline). Acids and alkalies (bases) are commonly referred to

as corrosive materials.

PIH Poison Inhalation Hazard. Term used to describe gases and

volatile liquids that are toxic when inhaled.

Protective clothing Includes both respiratory and physical protection. One cannot assign a level of protection to clothing or respiratory devices

separately. These levels were accepted and defined by response organizations such as U.S. Coast Guard, NIOSH,

and U.S. EPA.

Level A: SCBA plus fully encapsulating chemical resistant

clothing (permeation resistant).

Level B: SCBA plus chemical resistant clothing (splash

proof).

Level C: Full or half-face respirator plus chemical resistant

clothing (splash proof).

Level D: Coverall with no respiratory protection.

Polar See "Miscible".

Pyrophoric A substance which ignites spontaneously upon exposure to air

(or oxygen).

Radioactivity The property of some substances to emit invisible and

potentially harmful radiation.

Radiation Authority

As referred to in Guides 161 through 166 for radioactive materials, the Radiation Authority is either a Federal, state/provincial agency or state/province designated official. The responsibilities of this authority include evaluating radiological hazard conditions during normal operations and during emergencies. If the identity and telephone number of the authority are not known by emergency responders, or included in the local response plan, the information can be obtained from CANUTEC (613-996-6666), CHEMTREC® (1-800-424-9300) or CHEM-TEL (1-800-255-3924). They maintain a current list radiation authorities.

Refrigerated liquid

See "Cryogenic liquid".

Straight (solid) stream

Method used to apply or distribute water from the end of a hose. The water is delivered under pressure for penetration. In an efficient straight (solid) stream, approximately 90% of the water passes through an imaginary circle 38 cm (15 inches) in diameter at the breaking point. Hose (solid or straight) streams are frequently used to cool tanks and other equipment exposed to flammable liquid fires, or for washing burning spills away from danger points. However, straight streams will cause a spill fire to spread if improperly used or when directed into open containers of flammable and combustible liquids.

Vapor density

Weight of a volume of pure vapor or gas (with no air present) compared to the weight of an equal volume of dry air at the same temperature and pressure. A vapor density less than 1 (one) indicates that the vapor is lighter than air and will tend to rise. A vapor density greater than 1 (one) indicates that the vapor is heavier than air and may travel along the ground.

Vapor pressure

Pressure at which a liquid and its vapor are in equilibrium at a given temperature. Liquids with high vapor pressures evaporate rapidly.

Viscosity

Measure of a liquid's internal resistance to flow. This property is important because it indicates how fast a substance will leak out through holes in containers or tanks.

Warm zone

Area where personnel and equipment decontamination and hot zone support take place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. Also referred to as the decontamination, contamination reduction, or limited access zone in other documents. (NFPA 472)

Page 350

Water-sensitive

Substances which may produce flammable and/or toxic decomposition products upon contact with water.

Water spray (fog)

Method or way to apply or distribute water. The water is finely divided to provide for high heat absorption. Water spray patterns can range from about 10 to 90 degrees. Water spray streams can be used to extinguish or control the burning of a fire or to provide exposure protection for personnel, equipment, buildings, etc. (This method can be used to absorb vapors, knock-down vapors or disperse vapors. Direct a water spray (fog), rather than a straight (solid) stream, into the vapor cloud to accomplish any of the above).

Water spray is particularly effective on fires of flammable liquids and volatile solids having flash points above 37.8°C (100°F).

Regardless of the above, water spray can be used successfully on flammable liquids with low flash points. The effectiveness depends particularly on the method of application. With proper nozzles, even gasoline spill fires of some types have been extinguished when coordinated hose lines were used to sweep the flames off the surface of the liquid. Furthermore, water spray carefully applied has frequently been used with success in extinguishing fires involving flammable liquids with high flash points (or any viscous liquids) by causing frothing to occur only on the surface, and this foaming action blankets and extinguishes the fire.

### **PUBLICATION DATA**

The North American Emergency Response Guidebook (NAERG96) was prepared by the staff of Transport Canada, the U.S. Department of Transportation, and the Secretariat of Communications and Transportation of Mexico with the assistance of many interested parties from government and industry.

NAERG96 is based on earlier Transport Canada and U.S. DOT emergency response guidebooks. The first printing of NAERG96 (edition RSPA P 5800.7) included 860,000 English copies, 20,000 French copies and 175,000 Spanish copies. Past printings of the U.S. DOT ERG include: 1993 - 1.4 million copies (RSPA P 5800.6); 1990 - 1.2 million copies (DOT P 5800.5); 1987 - 1.1 million copies (DOT P 5800.4); 1984 - 748,000 copies (DOT P 5800.3); 1980 - 741,000 (DOT P 5800.2). Since 1979, Transport Canada has published four editions of the Dangerous Goods Initial Emergency Response Guide and distributed more than 500,000 copies.

### DISTRIBUTION OF THIS GUIDEBOOK

The primary objective is to place one copy of the NAERG96 in each emergency service vehicle throughout North America, through distribution to Federal, state, provincial and local public safety authorities. The distribution of this guidebook is being accomplished through the voluntary cooperation of a network of key agencies. Emergency service organizations that have not yet received copies of NAERG96 should contact the respective distribution center in their country, state or province. In the U.S., information about the distribution center for your location may be obtained from the Hazardous Material Information Exchange (HMIX). You can access the HMIX through your computer modem: 708-252-3275 (Effective 09/01/96 dial 630-252-3275), or via the Internet: hmix.dis.anl.gov (146.137.100.54). In Canada, contact CANUTEC at 613-992-4624 or via Internet at canutec@tc.gc.ca for information. In Mexico, call SCT at 52-5-684-1275.

### **REPRODUCTION and RESALE**

Copies of NAERG96 which are provided free of charge to fire, police and other emergency services may not be resold. NAERG96 (RSPA P 5800.7) may be reproduced without further permission subject to the following:

The names and the seals of the participating governments may not be reproduced on a copy of this document unless that copy accurately reproduces the entire content (text, format, and coloration) of this document without modification. In addition, the publisher's full name and address must be displayed on the outside back cover of each copy.

Constructive comments concerning NAERG96 are solicited; in particular, comments concerning its use in handling incidents involving dangerous goods. Comments should be addressed to:

In Canada:

Chief, CANUTEC
Transport Dangerous Goods
Transport Canada
Ottawa, Ontario
Canada K1A 0N5

Phone: 613-992-4624 (information) FAX: 613-954-5101 Internet: canutec@tc.gc.ca

In the U.S.:

U. S. Department of Transportation Research and Special Programs Administration Office of Hazardous Materials Initiatives and Training (DHM-50) Washington, DC 20590-0001

> Phone: 202-366-4900 FAX: 202-366-7342 Internet: welisten@rspa.dot.gov

In Mexico:

Secretaría de Comunicaciones y Transportes Dirección General de Autotransporte Federal Dirección de Transporte de Materiales y Residuos Peligrosos Calzada de las Bombas No. 411, 7o. Piso, Colonia San Bartolo Coapa, Coyoacán 04800, D.F.

Phone and FAX: 684-1275

### **NOTES**

### **EMERGENCY RESPONSE TELEPHONE NUMBERS**

### CANADA

1. CANUTEC

613-996-6666

(Collect calls are accepted)

### UNITED STATES

1. CHEMTREC®

1-800-424-9300

(Toll-free in the U.S. and Canada)
703-527-3887 For calls originating elsewhere
(Collect calls are accepted)

or

2. CHEM-TEL, INC.

1-800-255-3924

(Toll-free in the U.S. and Canada) 813-979-0626 For calls originating elsewhere (Collect calls are accepted)

3. MILITARY SHIPMENTS

703-697-0218 - Explosives/ammunition incidents (Collect calls are accepted) 1-800-851-8061 - All other dangerous goods incidents

### MEXICO

1. SETIQ

91-800-00-214 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
575-0838, 575-0842 or 559-1588
For calls originating elsewhere, call
0-11-52-5-575-0838 or 0-11-52-5-575-0842

2. CECOM

91-800-00-413 in the Mexican Republic
For calls originating in Mexico City and the Metropolitan Area
550-1496, 550-1552, 550-1485, or 550-4885
FAX 616-5560 or 616-5561

For calls originating elsewhere, call 0-11-52-5-550-1496, 0-11-52-5-550-1552, 0-11-52-5-550-1485, or 0-11-52-5-550-4885

For additional details see the section entitled "WHO TO CALL FOR ASSISTANCE".

### THIS DOCUMENT SHOULD NOT BE USED TO DETERMINE COMPLIANCE WITH THE DANGEROUS GOODS REGULATIONS OR TO CREATE WORKER SAFETY DOCUMENTS FOR SPECIFIC CHEMICALS



U.S. Department of Transportation
Research and Special Programs Administration



Transport Canada **Safety and Security** Dangerous Goods Transports Canada **Sécurité et sûreté** Marchandises dangereuses



**Secretariat of Transport and Communications**